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CONSTRUCTION

IMPORTANT FINANCIAL LEVERS TO IMPROVE CONSTRUCTION SYSTEM REVIEWED

Moscow DEN'GI I KREDIT in Russian No 5, May 81 (signed to press 16 Apr 81)
pp 22-29

[Article by Professor P. D. Podshivalenko: "Improving the Economic Mechanism in Construction"]

[Text] Having built a developed socialist society, the Soviet people continue working successfully to create the material-technical base of communism. Our country now has mighty production and scientific-technical potential.

Thousands of large modern enterprises equipped with the latest machinery were launched in the Eighth, Ninth, and 10th five-year plans. In the 10th Five-Year Plan alone, more than 1,200 large industrial enterprises were put into operation. Soviet people received 530 million square meters of housing. As the result of fulfillment of the construction program for the 10th Five-Year Plan, the country's fixed production capital increased 1.4 times, reaching the enormous figure of more than 1.1 trillion rubles at the start of 1981.

On this basis our country has achieved great successes in raising production volume, improving public well-being, and developing culture, public health, education, and other spheres of public life.

One of the decisive conditions that has insured these impressive results is the concern which the Communist Party has given to developing and improving construction work.

Construction in our country is one of the most important highly developed production sectors of the economy. Capital investment is growing constantly in all sectors of the economy. The total amount of capital investment in the national economy in the last three five-year plans was 1,475,900,000,000 rubles or more than 70 percent of all investment in the period 1918-1980. Capital investment for the 11th Five-Year Plan is envisioned in the amount of 711-730 billion rubles. All this is vivid testimony to the strength of the developed socialist society.

At the same time, our accomplishments in capital construction could have been much greater if we had made full use of the advantages of a planned economy, utilized internal reserves more fully, and worked harder to eliminate shortcomings. In the Ninth Five-Year Plan, for example, we did not secure the necessary concentration of labor, material-technical, and financial resources at start-up and other decisive projects. The dispersion of capital investment was not overcome in the 10th Five Year Plan either. Schedules for building and launching production facilities were dragged out.

In the current five-year plan, therefore, agencies concerned with economic management and all construction workers face an important challenge: fundamentally improve construction and raise the efficiency of capital investment. Improvement in the quantitative and qualitative indexes of the entire economy depends largely on how rationally capital investment policy is carried out. As Comrade L. I. Brezhnev emphasized at the 26th party congress, solving current problems and using existing capacities depends largely on the level of national economic management, the level of planning and control. An entire program of measures to improve the economic mechanism and strengthen its influence on raising efficiency and quality and improving the organizational structure of management and working style and methods is to be carried out in the 11th Five-Year Plan.

Decree No. 695 of the CPSU Central Committee and USSR Council of Ministers, adopted in July 1979, envisions a vast and concrete program of steps to improve planning and strengthen the influence of the economic mechanism on raising production efficiency and work quality. An organic part of the program is the system of concrete propositions that define ways to achieve all possible improvements in planning capital investment and construction, reorganizing design work on construction of new enterprises and reconstruction, technical reequipping, and expansion of existing enterprises, and broad use of economic levers and stimuli.

The measures outlined by the decree to improve the planning and management of capital construction aim at reducing the construction time of projects, cutting back on incomplete construction, and preventing the dispersion of capital investment over numerous projects. Clients and contractors are made more accountable for fulfillment of plans to launch capacities.

Beginning with the 11th Five-Year Plan, a five-year plan of capital construction (with a breakdown of assignments by years) will be ratified for the ministries, departments, and Councils of Ministers of the Union republics. These plans contain the following key indicators: launching of fixed capital, production capacities, and installations; ceilings on state capital investment.[1] The growth in capacities through technical re-equipping and reconstruction and the amount of investment for this purpose are singled out from the total volume of work introduced and the ceilings. Plans should be coordinated with available resources, technological and power equipment, labor and financial resources, and the capacities of construction-installation organizations. USSR Gosplan must submit to the USSR Council of Ministers concurrently draft plans of capital construction and plans of contract work broken down by contracting ministries and departments, Union republics, and client ministries and departments, with a statement on regions where construction will be concentrated.

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[1] Ceilings on capital investment (but not on the volume of capital investment, which was formerly used to evaluate the work of clients) are really a resource indicator that defines the maximum amount of investment (which consists of expenditures to build new and improve existing fixed capital in the national economy), including investment used for construction and installation work, for planned launching of capacities and projects, and for creating standard backlogs of work. This insures continuity of construction and turning over finished work to clients.

The main indicator (for the five-year period was a breakdown by years) of construction work for contracting organizations and ministries and departments that carry on construction and installation work is the launching of production capacities and projects. Introduction by technical re-equipping and reconstruction is singled out here. The five-year plans (with a breakdown of assignments by years) ratify the indicator of volume of commodity construction output (as a whole and broken down by clients). The term "commodity construction output" means the value of construction and installation work on enterprises, stages, start-up complexes, and projects that are ready to produce output or render services and have been turned over to the client. The client ministries and departments also ratify commodity output assignments for all grant-receiving associations, enterprises, and organizations.[2]

Before the 11th Five-Year Plan the production volume of a contracting organization was the gross amount of construction and installation work done, regardless of whether the construction was completed or not. Needless to say, this did not stimulate timely performance of the start-up program. Contractors, attempting to increase the volume of work, spread their personnel and means around at many different projects.

We should particularly note certain of the new propositions on planning that are directly relevant to financing construction and to bank control.

To insure continuity in the operation of plans for capital construction in five-year plans lists are being developed of newly begun construction projects and of existing enterprises that are to undergo reconstruction and expansion. The basic technical-economic indicators of each one of them are given in the lists.

Ratification of the list is done as follows: by the USSR Council of Ministers for the most important construction projects; by USSR ministries and departments and the Councils of Ministers of the union republics (with the consent of USSR Gosplan and the construction ministries) for projects with estimated costs of 3 million rubles and more; directly by USSR ministries and departments and the Councils of

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[2] Installations, complexes, stages, and enterprises ready to produce output are supplied with essential equipment, which is paid for by the client. Therefore, its cost is not included in the commodity output of the contracting organization.

Ministers of the Union republics, or in a manner established by them, for construction projects with estimated costs of less than 3 million rubles.

Itemized lists of projects for the entire period of construction (with a breakdown of assignments by years) are compiled on the basis of these lists of construction projects, ceilings on capital investment and construction-installation work, plans and estimates, and norms for length of construction. They are ratified in the same manner as the lists.

The breakdown of volumes of construction-installation work by years in the itemized lists is done jointly by the client and contracting ministries. The ministries are granted the right to give the corresponding authority to organizations subordinate to them. Annual volumes should be set in a way that insures regular work by construction organizations, creation of a technological backlog,[3] and compliance with standard construction schedules. Only in this case can banks finance construction.

A number of steps which are mandatory for the clients, contractors, and planning and other organizations give the plan stability and make its fulfillment realistic. For example, the ceilings on capital investment ratified in the five-year plan are not subject to re-ratification in the annual plans. The itemized lists of projects for the entire construction period must be constant. If less work than envisioned in the list was done at a construction site in the previous year, the construction organizations must make it up in the next year.

From now on the plan can only include construction sites which have ratified plans and estimates and working drawings for the year's volume of work on 1 July of the year preceding the planning year. Orders for the delivery of industrial and power equipment must be issued to manufacturing ministries for the entire period of construction, not for just one or two years as was formerly done. In the near future all construction sites included in the state capital construction plan are to be switched to comprehensive materials supply through territorial material-technical supply agencies on orders from construction-installation organizations in conformity with their needs as defined by plans and estimates.

Therefore, in both the planning stage and the stage of carrying out assignments to launch capacities and installations, banks will have to check whether these conditions exist and whether the involved organizations (along the chain) have performed their obligations.

Planning for existing production and new construction is done as a single integrated process. The capital investment ceilings in draft five-year plans are set for the planned growth in production of output and rendering of services. To determine their amount it is necessary to work out balances and calculations of the use of existing capacities and fixed capital, summary plans of reconstruction and technical re-equipping, and calculations of the need for capital investment and equipment. Resources can be allocated for the construction of new capacities and expansion of existing ones only when the national economic need for a particular type of output is not being met by existing enterprises (taking into account reconstruction and technical re-equipping at them). Plans envision preferential appropriation of material resources and equipment for reconstruction and technical re-equipping of enterprises, in addition to the essential ceilings on capital investment and construction-installation and contracting work. In this way priority is given to technical re-equipping and reconstruction, not new construction, which offers an opportunity to expand production capacities more rapidly and with lower (8-10 percent) capital investment figures.

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[3] "Backlog" here means those capacities and volumes of capital investment and construction-installation work which must be done in the particular planning period at installations, complexes, stages, and whole enterprises that are included in the start-up programs of later planning periods.

To create necessary additional conditions for accelerating work on technical re-equipping and reconstruction, the managers of production associations and enterprises have been granted the right to use increasing correction factors to estimate norms (including overhead expenditures) that take into account the specific conditions of doing the work at existing prices.

Implementation of these steps obligates banks to raise the level of their work on analysis of draft plans of capital construction, accepting plans and itemized lists of projects and units within projects, and monitoring the performance of assignments for launching production capacities, fixed capital, and projects.

In analysis of plans and itemized lists of construction projects and units within them, special attention must be devoted to full use of existing capacities, the possibility of increasing them primarily by technical re-equipping and reconstruction, and whether incomplete construction and existing stocks of uninstalled equipment are adequately put to use by the plan. This identifies reserves for investment savings.

A second very important area in solving these problems of raising the efficiency of capital investment, in addition to steps to improve planning, is taking steps to improve the quality of construction plans and estimates and supply them to the site on time. This requires allout improvements in bank work not only with respect to checking the quality of estimates and seeing that plans and estimates are delivered to sites on time, but also working out measures to reduce the cost of construction.

To step up the planning and construction of enterprises and installations, five-year plans (with a breakdown of assignments by years) of planning-surveying work and development of the system and material-technical base of planning and surveying organizations are developed and ratified. The assignments of this plan should be coordinated with the capital construction plan. Banks must systematically analyze draft plans and itemized lists of projects to be planned and accept them for financing if they are correlated with capital construction plans.

Where the construction of enterprises will take more than two years, the planning organizations of ministries and departments must develop plans and estimates not for the enterprise as a whole, but for its first stage based on the master plan of enterprises. The subsequent stages must be planned concurrently with construction of the first stage so that planning and estimate documents are ready before the start of construction of these stages. Therefore, the very system of planning orients all planning and economic agencies to optimal (not more than two years) times for turning capacities over for launching.

The planning documents should contain data on required materials, construction elements, and parts. The estimated cost of construction of each stage is ratified within the limits of the total estimated cost of construction of the enterprises, which is determined in the technical-economic substantiation.

Checking on compliance with these requirements is one of the important questions banks face in analyzing estimate documents.

Stable estimate prices are maintained during the five years, which provide a stable base for planning capital investments and strengthening cost accounting [khozraschet] in construction.

There is one more feature that must be noted, both in planning principles and in determining estimated cost. Corrections in the itemized lists of construction projects can only be made when plans are reviewed in connection with the use of improved equipment and more progressive technology. Even in those cases, however, the cost estimate can only be refined within the ceilings on capital investment in construction-installation work for the particular year ratified for the ministry and Union republic. Strict compliance with this procedure will be a real obstacle to dispersion of capital investment and growth in estimated cost and incomplete construction. And of course, the bank has a large part in its practical implementation.

For several years now construction workers have failed to perform their assignments for launching capacities and for several other indicators. It is obvious, therefore, that bank work to monitor contracting activities needs improvement, which includes more effective use of financial and credit levers. This work should be based on analysis of the performance of quantitative and qualitative assignments of the construction program using the indicators adopted following the above-mentioned decree of the CPSU Central Committee and the USSR Council of Ministers.

At the present time the economic activities of construction organizations are evaluated and they are given economic incentive based on the results of performance of assignments for launching production capacities and installations, commodity construction output, and growth in labor productivity and profit, that is, by their concrete contribution to raising production efficiency and work quality.

The decree outlined areas of work to improve the management of construction and strengthen cost accounting in construction organizations.

The transition to the two-level and three-level systems of management must be completed very soon. Until recently the four-level system of management was prevalent in contracting ministries and departments, and in some cases there were even five levels; this has had a negative impact on their work. The existence of a large number of small construction organizations (with annual work volume of 1-3 million rubles) prevents full use of machinery and industrial methods of production and makes it impossible to organize continuous production of output.

The formation of construction-installation production associations[4] is expected to insure the essential prerequisites for substantially furthering production specialization. Just by combining the efforts of the enterprises that belong to them, to say nothing of other factors, the associations create good conditions for increasing the volume of production and conserving labor, material-technical, and financial resources, which means raising efficiency and work quality. This is a radical transformation of construction management. Therefore, banks and their institutions must focus more attention on the process of reorganizing construction management because, in our opinion, this process is not developing fast enough.

The system of financing, credit, and clearing accounts in construction should be improved in view of the fact that production associations are now the main cost accounting element among both clients and contractors. While orienting ourselves to associations, nonetheless, internal cost accounting relations and finance-credit relations must be strengthened in all spheres of their activity.

Cost accounting relations are also growing stronger in planning-surveying organizations. One of the main requirements in this area is to switch all work to a contract basis and to settle accounts between clients and planning-surveying organizations for fully completed projects that have been accepted by the client.

It should be observed that bank institutions must essentially begin "with a clean slate" in their work with the financial management activities of planning organizations. The problem is that this aspect of bank work with planning organizations is still not receiving proper attention. Transferring them to the cost accounting system of organizing work necessitates stronger checks on performance of assignments for commodity output, labor productivity, and profit. This will be a major supporting element in the campaign to provide construction sites with high-quality plans and estimates at the right time.

The decree envisioned broad development of the brigade form of organizing and stimulating labor in the 11th Five-Year Plan. This should be the primary form. The brigades (or brigade councils) themselves are given the right to determine the amounts of bonuses and monetary payments, to nominate recipients of moral and material incentive, and take other steps to provide encouragement for highly productive labor, significant contributions by each worker to the common result of the entire collective, and growth in professional skill.

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[4] They include construction subdivisions, machine depots, transportation pools, enterprises to produce construction elements, parts, and materials, service systems, material-technical supply agencies, and the like.

There is no question that this will provide new impetus to improve and further the introduction of brigade cost accounting in construction. Therefore, we feel that the bank should give corresponding attention to checking on performance of steps toward further introduction of the brigade contract.

In the current five-year plan, production associations in construction (as also in industry) are switching to forming economic stimulation funds (material incentive fund, fund for sociocultural measures of housing construction, and production development fund) on the basis of stable norms. This is expected to develop the economic initiative of labor collectives and expand the rights of cost accounting organizations. The norms are set for the five years and differentiated by years. When the production associations adopt and carry out counterplans that exceed the five-year plan assignment for the next year, deductions to the fund are made at higher norms; if the assignments of the five-year plan are not fulfilled, deductions to the fund are made at lower norms.

The money in economic stimulation funds is used strictly for its designated purpose, and unused balances in the fund are carried over to the next year and are not subject to confiscation.

Let us consider certain characteristics of the formation and use of these funds in capital construction. The bonus amount included in the material incentive fund for introducing capacities on time and ahead of schedule has been increased from 2.2 to 3 percent of the estimated cost of construction-installation work by fixed capital turned over for use. In addition, there is a rule according to which, when the launching time is moved up compared to ratified norms, the general contractor receives from the client 50 percent of the profit envisioned by the plan for the period by which construction was shortened. The total of this money which is included in the fund must not exceed 0.5 percent of the estimated cost of construction-installation work for each month ahead of schedule that the capacities were launched.

Production associations independently develop and ratify measures paid for by the production development fund toward mechanization and automation, replacement and modernization of construction machinery and equipment, and improving the organization of production and labor, as well as other measures to introduce technical advances in construction. Based on the reports and proposals of the associations the corresponding expenditures are fully included in the plans of ministries and departments and are given capital investments, material resources, and volumes of contracting work (within the ceilings of capital investment and allocated resources established for them) on a priority basis.

A similar procedure has been established for work done from the fund for sociocultural measures and housing construction.

The construction ministries and departments are authorized to have a unified fund for the development of science and technology, earmarked chiefly to finance scientific research, experimental design, and production engineering projects.

Beginning with the 11th Five-Year Plan, authorization has been given to use a number of steps to increase the incentive of labor collectives to accelerate growth in labor productivity and reduce worker mobility (strengthening the dependence of the wages of each worker and the labor collective as a whole on growth in labor productivity and improving the final work results of the production association, granting production associations the right to pay supplements to standard wage rates with savings on the wages fund compared to the established norm or planned fund, and so on).

There is to be a gradual transition during the current five-year plan from computing assignments for growth in labor productivity and their fulfillment on the basis of the gross volume of construction and installation work to defining this indicator by net (normative) output or some other criterion which more closely reflects changes in labor expenditures and computing the wages fund by the norm of wages per ruble of output, by the indicator adopted for planning labor productivity. This should create a new stimulus to conserve material-technical and labor resources and exclude the impact of the use of expensive materials and construction elements on the level of labor productivity. Accordingly, the banks must work out a system to monitor expenditure of the wages fund in construction.

The economic accountability of production associations and ministries for the results of financial-management activity, and also their interest in most efficient use of material and financial resources, are being raised.

Five-year plans must now include a summary financial balance with distribution of incomes and expenditures by years and a summary financial balance in the annual plan. These are expected to insure financial resources to carry out all measures contained in the annual plan and to provide essential reserves. In addition, calculations will be made for the summary financial balances and proposals offered to balance them. USSR Gosbank and USSR Stroybank are working out calculations of long-term and short-term credit for the five-year period, also with a breakdown by years.

During preparation of financial plans and calculations for the budget and credit plan, the need to use material-technical, labor, and financial resources more economically in order to achieve maximum results with a reduction in expenditures must be taken into account. This creates a possibility as early as the stage of development of draft plans for preparing proposals on raising the efficiency of use of capital investment.

Beginning with the 11th Five-Year Plan, a stable norm, differentiated by years of the five-year plan, for deductions from profit received by industrial ministries is being established for the ministries (as they are ready). It is designed to finance capital investment, repay bank credit and interest, and permit growth in working capital, the formation of economic stimulation funds, and other planned expenditures to develop the sector.

Where the organization's own capital is inadequate to finance capital investment for production projects in the five-year plans of ministries, associations, and enterprises, provision is made to enlist bank credit and budget appropriations.

As can be seen from the above, the organization's own capital and bank credit are becoming paramount as sources of financing for capital investment.

The banks carry out financing of state capital investment for production construction projects on a continuous basis. This procedure is based on the itemized lists of projects for the entire construction period. The ratified estimate should operate as the ceiling on capital issued. Continuity of financing is accomplished with the help of credit: if the plan of capital construction in a particular year is overfulfilled, bank loans are granted.

Many client enterprises and ministries have already begun using credit more widely. At some of them credit accounts for more than 35 percent of sources of financing.

It follows from the decree that credit also operates as a factor to stimulate the introduction of highly efficient measures. Thus, credit may be granted for expenditures to develop science and technology that are not envisioned in the plan with repayment (including interest) from the resources of the unified fund for the development of science and technology in two years from the day of issue. Banks have the right to grant production associations (enterprises) and organizations credit (beyond the ceiling of state capital investment) to carry out highly efficient measures to produce new output, raise the quality of articles being produced, expand the production of consumer goods, and improve services to the population if expenditures will be repaid through additional profit in a period of less than two years. The loan and interest are repaid in the same period of time. In determining the payback time for expenditures and the source for repayment of credit, it is permitted to consider up to 50 percent of the turnover tax from sale of consumer goods produced as the result of the measures for which credit was granted.

Measures are also being carried out to increase the incentive of production associations (enterprises) to use production capital better and conserve material resources. The norms for the payment for production capital have generally been set at six percent. It is important here that the payment for above-norm stocks of material assets not acquired on credit and uninstalled equipment should be made from profit remaining at the disposal of the associations, enterprises, and organizations. At the same time, where plans for production volume and profit are fulfilled with a lower capital cost than envisioned in the plan, the savings on the payment for capital remains at the organization's disposal and payments to the budget are reduced by this amount.

One noteworthy feature of work to strengthen the role of finance and credit levers envisioned by the decree is the introduction of payment between clients and contractors for enterprises, start-up complexes, stages, and installations that are completed, turned over for operation, and ready to produce output and render services. The payment for work in this case is made based on the estimated cost of the commodity construction output.

Implementation of payments for completed projects at the estimated cost of construction and installation work (regardless of their launching) has already exerted a significant influence to shorten construction time and the time that capital is tied up in incomplete construction. Universal introduction of the new payment system will unquestionably further this tendency and at the same time increase the accountability of clients and contractors, for the project must not simply be completely built, it must be completely ready to carry on its production activities.

The decrees and resolutions of the 26th CPSU Congress acknowledged it as wise for contracting organizations to use credit to build enterprises (or structures) in certain sectors until they have reached the full cost determined by the estimate (including equipment) adopted by the general contractor. The client should receive enterprises (or structures) that are complete, as we say "ready to go." The advantage of this method is that the balances of the contracting organizations take account of virtually all expenditures related to the construction of the enterprises or installations until they begin active operations. This increases their accountability for completing the start-up program as quickly as possible. When the contracting organization is working to make projects "ready to go" (both in terms of construction and installation work and paying for incoming equipment), expenditures incurred from the beginning of construction of the enterprise or installation until it is turned over to the client are repaid with bank credit.

As envisioned by the document "Basic Directions," the machine building enterprises and associations must insure delivery of full sets of equipment with a high level of factory readiness, do the installation and adjustment work, and turn the equipment over to the client. This refers, of course, chiefly to complex equipment. In this way, machine building will not only produce modern equipment but also actively promote its efficient use by customers.

Therefore, the indicator of putting into operation is now included in the plans of general equipment suppliers and the industrial ministries to which they are subordinate. A third party thus appears in contract relations. This is the general contractor, who may also act as a regular contractor. It should be noted that this marks a significant advance in developing the contract method of work.

Introduction of delivery of equipment in full sets and installation by the manufacturing plants gives these plants a greater interest in the final results and strengthens their accountability for prompt and complete delivery of equipment to the construction sites. Until very recently, these plants have done nothing more than ship the equipment.

When this system has been introduced, the final output of machine building will be equipment that has been manufactured, assembled and prepared for installation at the plant, installed at the construction site, and then tested. The spread of this method promises significant economic benefits. This is a large field for activity by the banks and their institutions, beginning with the draft plan (how fully do they consider the possibilities of delivering full sets of equipment and installing it with personnel of the suppliers) to using economic methods to speed up the practical introduction of the machinery in use.

In recent years, credit for incomplete construction-installation work has become widespread. It accounts for more than 50 percent of all loans granted to contracting organizations.

Until 1979 the bulk of incomplete production (up to 85 percent) was covered by client advances which, in our opinion, are a type of commercial credit. At the same time bank credit accounted for only a little more than 10 percent.

With the transition to payment based on the estimated cost of commodity construction output, clients will no longer give advances to construction organizations for expenditures related to incomplete construction and installation work. Until the planned time for turning over fully built enterprises, start-up complexes, stages, and installations, these expenditures are covered by bank credit. The source of the credit is expected to be money of the plants which is freed in connection with the transition to settling accounts for the full job without intermediate payments. A norm of up to 10 percent of the annual volume of contract work done by the actual personnel of the corresponding organizations is established for expenditures on incomplete construction and installation work (in the period between credit regulation time). The norm is provided from the capital of the contracting organizations themselves available for this purpose and, with respect to any shortfall, from bank credit within the limits of the client capital freed in connection with the transition to settling accounts without intermediate payments.

The decree on improving the economic mechanism devotes a great deal of attention to the material accountability of production associations and organizations for compliance with contract obligations and timely delivery to customers of output in the necessary assortment and quality.

To insure timely settlement of accounts for output delivered in conformity with contracts and to increase the accountability of purchasers for observation of payment discipline, a system is being introduced in which when the time of payment arrives and the customer temporarily lacks the money, the bank will pay the payment documents accepted by him on credit. These loans are assigned to the customer and must be repaid within a period of up to 60 days in the order established for payment for commodity-material assets. An annual interest rate of five percent is charged for the credit, and when this time period runs out the credit continues at a higher rate of interest. This shows that these loans are extraordinary in nature and extensive use of them should attract the attention of higher agencies, ministries and departments, and bank institutions who will want to know why the particular association (enterprise or organization) has been unable to pay and what measures must be taken. In our opinion, one of the forms of this work should be mandatory on-site auditing of the financial activities of the contracting organization, giving it temporary financial aid, backing it up with material-technical and other resources, and eliminating other factors that are preventing normal operations.

It should also be noted that where there are violations of the periods of loans to pay for equipment, to cover expenditures for incomplete production, to make payments, and the like, further credit to the production associations, enterprises, and organizations, is given at a higher rate of interest. This means that bank credit has a larger part in insuring continuity of payments in the national economy and timely elimination of problems that cause failure to pay.

What conclusions can be drawn already from those fundamental changes which follow from the measures, planned and being implemented, to improve the economic mechanism in construction in relation to financing capital investment, credit, and settling accounts?

The continuity of construction is insured by continuous planning, supply, financing, credit, and settlement of accounts. Finance and credit are structured so as to provide timely assistance to construction projects and organizations overfulfilling plan assignments or when they have temporary financial difficulties. At the same time, cases of mismanagement, uneconomical use of capital investment, and violations of state financial plan discipline must be stopped promptly and resolutely.

The effectiveness of the system of payment for completed construction output must be increased. One of the most important features of this system under present conditions is that its introduction leads to broader use of credit levers, both to influence the system of settlement of accounts itself and to enhance their role in reducing construction time and speeding up the circulation of capital investment.

The sphere of application of long-term credit is increasing greatly, but short-term credit is growing even more. It is plain that we should expect a significant increase in the issuance of credit and balance of indebtedness, which of course will require acceleration of the cycle of credit investment. The banks, managers, and credit workers are becoming more responsible for the effectiveness of long-term and short-term credit.

We should especially stress the key problem of mobilizing resources to be used for credit. One of the important sources of credit resources is repayment of earlier loans. Therefore, we must work persistently to collect loans on time. All the money of clients that is freed in connection with the transition to payment for completed commodity construction output should be used promptly and fully for credit.

The document "Basic Directions of Economic and Social Development of the USSR for 1981-1985 and the Period Until 1990" points out that the basic challenge of capital construction is to continue building up the country's production potential on a new technical basis and to develop the nonproduction sphere. Successfully meeting this challenge depends on fully and thoroughly implementing the economic principles developed by the Communist Party. This obligates banks to intensify and improve their monitoring of the implementation of these principles and performance of the assignments of the 11th Five-Year Plan in the field of construction: raising the efficiency of capital investment and construction, reducing the time required to launch capacities and projects, and raising labor productivity and profitability.

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BELORUSSIAN AUTHORITIES URGE STEPPED-UP CONSTRUCTION, IMPROVED WORK

Minsk SOVETSKAYA BELORUSSIYA in Russian 12 Jul 81 p 1

[Article: "At the Central Committee of the Belorussian Communist Party and Belorussian Council of Ministers — Additional Steps To Insure Fulfillment of the Capital Construction Plan for 1981"]

[Text] The decree adopted by the Central Committee of the Belorussian Communist Party and Belorussian Council of Ministers concerning capital construction notes that construction has fallen behind in the republic at a number of enterprises and sites that are of paramount state importance, in particular capacities at the Mozyr' petroleum refinery, the Novopolotskiy protein-vitamin concentrate plant, the Gomel' Glass Plant imeni Lomonosov, and at the Brest plant that produces equipment for the meat industry, as well as in the Mogilev Khimvolokno [Chemical Fiber] and Bobruyskshina [Bobruysk Tire] production associations.

The construction ministries and the client ministries and enterprises have organized construction in an unsatisfactory manner at a number of sites building nonproduction facilities and enterprises of the light and food industry earmarked to produce consumer goods.

Serious shortcomings continue to occur in capital construction and existing capacities are far from being fully used. The construction and planning organizations have not exhausted all reserves for rational and economical use of scarce materials, in particular rolled metal products, cement, pipe, and petroleum bitumen. Failure by clients to deliver equipment and materials to the sites on time continues to be a problem.

These shortcomings in fulfilling the capital construction plan indicate that the managers of republic ministries and departments, oblast executive committees, the Minsk city executive committee, and enterprises and organizations are going slowly in reorganizing their work in light of the requirements of the 26th CPSU Congress and the 29th Congress of the Communist Party of Belorussia. Certain party and Soviet agencies are not being tough enough with economic managers and demanding that they eliminate shortcomings in construction work. They fail to give adequate attention to the introduction of progressive know-how, establishing proper working and living conditions for workers, and raising the level of organization of socialist competition and the effectiveness of ideological indoctrination work in the collectives.

The Central Committee of the Belorussian Communist Party and the Council of Ministers of the Belorussian SSR have obligated republic ministries and departments, oblast committees of the Belorussian Communist Party, oblast executive committees, and the managers of construction organizations and client enterprises to take additional steps to improve the situation in capital construction, to intensify monitoring, and to give more operational help to the construction sites.

The construction ministries and departments of the Belorussian SSR and the managers of construction organizations working jointly with clients must, before 20 July, develop and correct existing monthly and weekly schedules for launching projects into operation to match the assignments that have been given. At priority sites it will be necessary to organize work in two, and when necessary three, shifts. And to use sliding schedules.

Belorussian SSR Gossnab, the Belorussian SSR construction ministries and departments, and the Belorussian Ministry of Building Materials Industry must insure that projects under construction receive materials and design elements in strict conformity with plans for engineering and technological preparation for construction. It has been suggested that Belorussian Gossnab and Gosplan, together with the Belorussian construction ministries and departments, review and settle, by 20 July, the questions of supplying building materials to construction sites.

In order to see that materials are used for their designated purposes, the Belorussian SSR Ministry of Industrial Construction, the Belorussian Ministry of Rural Construction, the Belorussian SSR Ministry of Installation and Special Construction Work, and the Belorussian Interkolkhoz Construction Trust have been prohibited from performing contract work on direct contracts where the client has not provided materials.

Belorussian SSR Gosplan and Gossnab, the republic ministries and departments, the oblast executive committees, the Minsk city executive committee, and the client enterprises must complete supply of necessary equipment and cable to projects that are to be launched the second half of the year by three months before the planned date of launching.

Ministers and the managers of departments and client enterprises have been made personally accountable for timely and full supply of equipment and materials to construction projects that are scheduled for launching.

The Belorussian SSR People's Control Committee and its local agencies must keep strict track of fulfillment of this commission.

It was suggested that Belorussian SSR Gosplan and Gossnab together with the contracting organizations review and, before 1 September of this year, resolve the questions of manufacturing power tools for construction work at enterprises of the republic and that oblast, city, and rayon committees of the Belorussian Communist Party, oblast executive committees, city executive committees, and rayon executive committees keep strict track of the manufacture of power tools for construction by the enterprises.

The Belorussian ministries and departments, oblast executive committees, Minsk city executive committee, and client enterprises and organizations must:

1. Appoint working and state commissions to accept capacities and projects for operation;

2. Provide operations workers for 1981 start-up projects at least three months before they are launched and see that these personnel work together with installation and adjustment organization;

3. For boiler installations to be launched in the third and fourth quarters of this year, complete equipment supply by 1 August and provide service personnel by 1 September. Belorussian SSR Gossnab and Belorussian SSR Goskomsel'khoztekhnika [State Committee for Agricultural Equipment] must specially monitor the delivery of equipment, pipe, pressure fittings, and cable in strict conformity with schedules for the launching of boiler installations and heat systems.

Before 1 October of this year the Belorussian State Committee for Labor must send construction organizations of the republic all the workers planned for 1981 from the organized recruiting, while the Belorussian State Committee for Vocational-Technical Education and republic construction ministries and departments must send 12,500 vocational-technical school students a month for the most important construction projects in the republic during September and October.

The oblast, city, and rayon committees of the Belorussian Communist Party and the oblast, rayon, and city executive committees are urged to give construction organizations and enterprises practical help in producing building materials. To accomplish this, by 25 July they must take workers in the essential occupations from industrial enterprises and other organizations in the established manner and put them at the disposal of construction organizations until the end of the year. It is prohibited to take workers, motor vehicles, and machinery away from construction-installation organizations, construction industry enterprises, and building materials enterprises to perform other jobs.

The Belorussian SSR Ministry of Building Materials Industry and the industrial enterprises of the republic must make fuller use of internal reserves at existing capacities to produce the additional essential materials and articles needed by construction organizations, while Belorussian SSR Gosplan and Gossnab are to direct at least half of the above-plan production of trucks and tractors for allocation within the republic in the second half of the year to construction ministries and departments.

Local party and Soviet agencies should, where necessary, enlist the motor vehicles and construction equipment of other sectors of the economy to meet the needs of start-up projects.

Party, Soviet, and economic bodies and trade union and Komsomol organizations must raise the level of organizational work at the sites themselves and insure highly productive labor by every person.

The oblast, city, and rayon committees of the Belorussian Communist Party, party committees, and primary party organizations at construction-installation subdivisions should constantly monitor the course of construction at start-up projects and take quick, practical steps to eliminate shortcomings that hinder successful construction.

The Belorussian Council of Trade Unions, the Belorussian ministries and departments, and the republic committees of the sectorial trade unions are assigned to develop effective socialist competition among labor collectives to fulfill 1981 capital construction assignments.

The Central Committee of the Belorussian Communist Party and the Belorussian Council of Ministers express their firm confidence that the oblast, city, and rayon party committees, the oblast, city, and rayon executive committees and the republic ministries and departments will do everything possible for successful fulfillment of assignments to launch projects and capacities in 1981 and to create the necessary backlog at construction sites that are to be turned over for use in 1982 and later years of the five-year plan.

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MEASURES FOR IMPROVING INTENSIFICATION OF CONSTRUCTION OPERATIONS

Moscow EKONOMICHESKAYA GAZETA in Russian No 29, Jul 81 p 5

[Article by I.N. Dmitriyev, chief of the Construction Department of the CC CPSU: "An Important Task of the Builders"]

[Text] As decided upon during the 26th party congress, capital investments, including all sources of financing, are being increased during the Eleventh Five-Year Plan by 12-15 percent. Their overall volume will come to 711-730 billion rubles, compared to 634 billion during the Tenth and 493 billion rubles during the Ninth Five-Year Plans.

This means that the growth in national income (18-20 percent) planned for the five-year plan will be achieved, with a smaller absolute and relative increase in capital investments than earlier was the case. The new and higher goals will be achieved without an increase in the number of builders, but with considerable economies being realized in the quantities of material resources used.

"The new five-year plan will serve as a serious test for the builders" commented Comrade L.I. Brezhnev in a report delivered before the 26th CPSU Congress, "A typical feature of the plan will be maximum concentration of forces on the accelerated completion and placing in operation of those enterprises which are capable of producing the greatest increase in output and eliminating bottlenecks. We have already launched this program and it must be followed in a strict manner."

The implementation of the decisions handed down by the party and government with regard to improving the economic mechanism is promoting improvements in the effectiveness of capital investments, accelerating construction and improving its quality. The introduction of new managerial methods has already exerted a positive effect on the intensification of construction production. For the national economy as a whole and compared to the 1979 level, the volume of unfinished construction has decreased by more than two points. The turnover of workers at construction sites has decreased. More than 80,000 brigades have commenced using the new form of cost accounting -- the brigade contract method.

Economic Mechanism in Action

Over the past 2 years, the greatest successes have been realized in those areas where the 12 July 1979 Decree of the CC CPSU and the USSR Council of Ministers has been carried out in a thorough and creative manner and based upon high party principles. The builders of Belorussia, Uzbekistan, Azerbaijan, the Bashkirskaya ASSR and Leningrad, Saratovskaya and a number of other oblasts devoted increase attention to the economics of production, to cost accounting, to the improved use of the funds and to the concentration of forces and resources.

In the Bashkirskaya ASSR, for example, 60 percent of the overall volume of capital investments for industrial construction is used for underway projects. Here the number of newly begun construction projects has been reduced by a factor of four and the average volume of capital investments for one industrial project has increased by 20 percent. The proportion of equipment costs, compared to the overall volume of capital investments, increased to 55 percent compared to 45 percent in 1975. In 1981, more than 75 percent of the brigades engaged in housing construction and 50 percent of those in industrial construction are operating on the basis of N. Zlobin's method.

The number of projects being built simultaneously in Leningrad Oblast has decreased by 40 percent. The volume of resources required for one construction project has almost doubled. The proportion of capital investments for underway projects of an industrial nature has reached 70 percent.

The volume of unfinished construction in Saratovskaya Oblast has been reduced by almost 300 million rubles and the norm has been achieved, with a high level of technical readiness for the enterprises under construction. Here, over a period of 2 years, the number of construction projects decreased by almost one and a half times and the proportion of resources used for underway projects increased by 12 percent.

The new managerial methods being employed in construction during the Eleventh Five-Year Plan are based upon the practical experience of a number of republic ministries and territorial main administrations, the first to employ these methods in their work. Thus, since 1976, the Ministry of Industrial Construction for the Belorussian SSR has been using economic levers for accelerating the placing in operation of projects and other elements of an improved economic mechanism. During this period, the volume of marketable construction output of Minpromstroy [Ministry of Indust Construction] for the BSSR amounted to 4.3 billion rubles and the average annual volume of construction-installation work -- 913 million rubles, or 17 percent higher than during the Ninth Five-Year Plan. The construction periods for the industrial projects were reduced by 17 percent. A profit of 370 million rubles was realized.

Positive results were achieved by other republic ministries and territorial main administrations, all of which had introduced new managerial methods into their operational practice. The construction periods within Minstroy [Ministry of Construction] for the LiSSR were reduced by 11 percent. Mintyazhstroy [Ministry of Heavy Construction] for the UkSSR placed almost 40 percent of its projects in operation ahead of schedule.

The extensive use of the experience of these organizations will promote to a considerable degree the implementation of the statutes called for in the decree of the CC CPSU and the USSR Council of Ministers having to do with the economic mechanism. Two years have passed since the day that this important party and state document was adopted. The new managerial elements are beginning to be introduced into the operational practice of builders in all areas. However, some party organizations are not imposing the proper degree of exactingness on those personnel responsible for implementing the decree, efficient control is not always being exercised over the fulfillment of the measures planned and the workers are not being properly motivated towards further strengthening state, production and labor discipline.

USSR Gosstroy and the construction ministries are still not carrying out sufficient organizational work in connection with implementation of adopted decisions. The measures developed by them are not organizing the collectives of workers completely towards the unconditional fulfillment of the tasks associated with marketable construction output or ensuring the timely placing in operation of production capabilities and projects.

The status of affairs at the construction sites is still improving only slowly. The plans for the first 6 months were underfulfilled by many construction-installation organizations. The dispersion of resources continues. Quite often the construction costs increase unjustifiably.

Economics and Stability of Estimates

The improvement called for in the level of construction planning must not be implemented without raising the quality of the plans and determining the reliability of the cost of the projects during the planning stage. Checks carried out on the technical documentation by the organs of expertise and the organizations of contractual ministries reveal that in many instances the approved estimated cost does not conform to the actual cost. This disrupts the system of state planning and the balance in the distribution of labor and material resources and it leads to a breakdown in the schedules for placing projects in operation.

For individual construction projects, a reapproved estimated cost exceeds the original one to a considerable degree and the construction periods are extended. Thus, in accordance with the plan for the first phase of the Cheboksary Plant for Industrial Tractors, the cost of construction exceeded 1.5 billion rubles, compared to the figure of 255 million rubles called for earlier -- an increase of almost six times. Behind this fact lies mistakes committed by Minsel'khozmash [Ministry of Agricultural Machinery] in determining the estimated cost of construction and repeated changes in the design and production volume for the tractors. In the mentioned plan, Glavgosekspertiza brought to light unnecessary storehouse sites and auxiliary facilities in a number of departments. It turned out that individual technological processing stages were being operated to only 70 percent of their capability.

It bears mentioning once again that in conformity with the system introduced at the beginning of this year for approving the estimated cost, a limit exists for the entire period of construction. The cost of construction set forth in the planning-estimates documentation must conform to the estimated cost or be lower than it. Each incident of only a slight deviation from this requirement warrants proper party-type discussion in the collectives. Incidents of distortions in determining the true estimated cost should be viewed as crude violations of state discipline.

The party and governmental decree on improving planning-estimates work, adopted at the beginning of this year, is opening up broad opportunities for solving urgent problems. The means for further improving the quality of plans and the efficiency of capital investments are defined in this decree.

At the same time, greater responsibility is being imposed upon the ministries, departments, organs of expertise and also the planning, design and scientific-research organizations for ensuring a high technical and economic level for the planning solutions and correct determination of the estimated cost of construction. Extreme importance is attached to ensuring that USSR Gosplan, jointly with Gosstroy, determines the true estimated cost of construction prior to its inclusion in the plan. An unrealistic estimated cost is a serious impediment with regard to the development of balanced construction plans. The estimate must be stable and economical.

It is noted that in each specific instance the deviations from the existing construction norms and rules, encountered in the plans, are justified in terms of "economic need." However, a more thorough study of the problem reveals that such "corrections" hardly benefit the national economy.

The ministries and departments and USSR Gosstroy must in the near future evaluate the existing norms and rules for planning and reveal the reserves and surpluses which they provide. The work is not promoted by the availability of a tremendous number of normative documents on construction among the various ministries and departments. They are constantly being supplemented and defined more precisely and at the same time they are very slow in reflecting scientific-technical achievements and leading experience. The overall efforts must be directed towards creating a single normative base in construction.

In addition to realizing direct savings, the task is also one of employing efficient construction materials and designs and progressive space-planning and design solutions and thus achieving a reduction in materials-intensiveness and, on this basis, in the production costs for construction operations. The campaign to achieve economies at construction sites is by no means a short term campaign, but rather it is a most important managerial method for all stages and all spheres of construction production. This was pointed out with new emphasis in the decree of the CC CPSU and the USSR Council of Ministers entitled "Intensifying the Work of Achieving Economies and Making Rational Use of Raw Material, Fuel-Energy and Other Material Resources."

Improvements in Planning Solutions

An economic experiment conducted at Glavzapstroy [Territorial Main Administration for Construction in the Western Regions of the RSFSR] has uncovered large reserves for improving the quality of planning-estimates documentation and, it follows, raising the effectiveness of capital investments. This territorial main administration of USSR Minstroy is carrying out work in Leningrad and Leningrad Oblast.

Based upon its initiative and with the approval of USSR Gosstroy, the role played by contractual construction organizations in improving planning solutions was strengthened during the Tenth Five-Year Plan. A bureau of experts for improving planning solutions was created at Glavzapstroy. Through this bureau, in accordance with the conditions of the experiment, the contracting organizations were able to introduce changes into the plans affecting a reduction in material and labor expenditures at the construction sites. The changes could be introduced prior to receiving the blueprints in accordance with the approved documentation. The planning institutes must take these proposals into consideration.

In 1978, the valuable experience was employed by bureaus of experts in Glavmosstroy, Glavsreduralstroy, Glavsrednevolzhskstroy and Minstroy for the Uzbek SSR. During the period of their activity, proposals for 129 plans representing a savings of 110 million rubles were submitted. This was 9.5 percent of the overall estimated cost, or 13.2 percent of the cost for the construction-installation work. The realization of the comments made will make it possible to reduce the labor expenditures of the builders by 883,000 man-days.

In other words, the work carried out by small collectives of these bureaus (overall number of personnel - 186) was equivalent to the work of two construction-installation associations having an overall annual program of more than 100 million rubles and 7,000-8,000 personnel. Moreover, there was no requirement for expending materials or using machines or mechanisms and a savings was realized in energy resources.

A substantial reduction took place in the materials-intensiveness of construction. Based upon the proposals submitted, savings were realized in the form of 173,000 cubic meters of precast and monolithic concrete, 12 million bricks and 25,000 tons of metal.

Many collectives of customer-organizations and planning institutes possess a correct understanding of the tasks and goals established by the experiment and are applying themselves in a responsible manner to the measures to be carried out. Thus perceptible results are being obtained. Owing to the timely adoption of effective proposals by the customer-ministries, the contractor for a number of projects of Trust No. 32 of Glavzapstroy, owing to a reduction in the cost of construction for the projects, obtained 240,000 rubles of above-plan profit. Material expenditures were lowered by almost 40 percent. The state realized a true savings. Here the actions taken by such customers as Goskomsel'khoztekhnika for the USSR and Mintyazhmash are deserving of approval.

Selection of a Variant

In carrying out the requirements of the decree concerning the economic mechanism, particularly the development of alternative planning, the collectives of Glavzapstroy, USSR Minstroy and the Leningrad Oblast office of Stroybank conducted still another bold experiment. In accordance with individual plans processed by institutes, taking into account the proposals of the bureaus of experts of Glavzapstroy, a second variant of the plan is being created owing to a reduction in the cost of the construction-installation work.

The initial results obtained have been reassuring. Thus, in accordance with the variant of Planning Institute No. 1 of USSR Gosstroy, the cost for an administrative building of a repair-mechanical base of the Fosforit Association was lowered almost twofold compared to the originally approved cost. The variants for plans for individual engineering solutions, prepared by the Santekhproyekt and TsNIIpromzdaniy institutes of USSR Gosstroy, for the Vozrozhdeniye Spinning-Weaving Factory in Leningrad, reduce the cost of these solutions by twofold or more and their implementation decreases labor expenditures during construction by more than threefold.

The USSR Ministry of Construction and its customers must avoid these departmental barriers and find the opportunity for implementing these solutions. It is very important for USSR Gosstroy, in the example cited, to determine the direction to be followed for developing the alternative planning.

The search by the builders for optimum variants is forcing the planning institutes to view their own works in a more critical manner, to increase exactingness with regard to observance of the norms and rules for planning and to carry out more detailed studies of local conditions at the construction sites. In the process, as a rule, an improvement will take place in the structure of the capital investments and an increase in the proportion of expenditures for equipment will be ensured.

Special interest is being attached to increasing the capabilities of enterprises under construction, by means of the internal reserves in the plans and without an actual increase in the expenditures for construction-installation work. Thus, based upon proposals by the contractor, the capability of a sewing enterprise of the Leningrad Tribuna Association was increased by 28 percent. Proposals were introduced for Mintyazhmash in connection with the Association for Hoisting and Transport Equipment imeni S.M. Kirov. The capabilities of the production operation being built here can be increased by 30 percent, on areas called for in the plan approved earlier.

The results achieved during the course of the experiment on improving planning solutions can be even better. Unfortunately, some customer ministries and planning institutes, under various pretexts, are delaying their examination of the contractor's proposals, they are reluctantly accepting them and they are attempting to reject the processing of the documentation at any cost. And indeed the effectiveness of the measures is greatly dependent upon the objectivity and operational efficiency of the services of the customer and planners. At times, the losses in time caused by examination and coordination negate the value of a proposal. The contractor, taking into account the construction schedules, is forced into returning to deliberately irrational planning solutions.

It is obvious that USSR Gosstroy and its party organization must raise the fighting spirit of the services of Glavgosekspertiza. The time is at hand for USSR Gosstroy to summarize the results of the experiments carried out and, jointly with other interested organs, convert the work of the contractual organizations in lowering the cost of construction and raising the effectiveness of capital investments over to a firm organizational-legal basis. A solution is required for the problem of stimulating such work for all those participating in the construction process.

The solving of these problems will make it possible to solve more rapidly and more successfully the tasks advanced during the 26th party congress and to ensure a more complete conversion of construction production over to an intensified basis.

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COMPETITION TO CONSERVE RESOURCES ADVOCATED

Moscow EKONOMIKA I STROITEL'STVO in Russian No 7, Jul 81 (signed to press 3 Jun 81) pp 29-32

[Article by V. F. Illarionov, deputy chief of the Construction and Building Materials Trade Union Central Committee Department: "Develop Competition Among Design and Construction-Installation Organizations to Conserve Resources"]

[Text] The resolutions of the 26th CPSU Congress require that a battle be started for economy and thrift in every way possible. The economic system must be economical--this popular expression by comrade L. I. Brezhnev from the party Central Committee's report to the congress has become the slogan of our time.

In the decree by the CPSU Central Committee, USSR Council of Ministers, AUCCTU and Komsomol Central Committee "Concerning the All-Union Socialist Competition for the Successful Completion and Overfulfillment of the Goals for the 11th Five-Year Plan" it emphasizes that the slogan of the competition should be: "Work Efficiently Ensuring Quality." This means to act in a thrifty manner toward public property, to skillfully and efficiently use all available resources and the entire production potential and to achieve high results with the least expenditures.

It is well known that expenditures for material resources amount to more than 60 percent of the estimated cost of construction. More than 20 million tons of rolled ferrous metal, 270 million cubic meters of concrete and reinforced concrete components, more than 100 million tons of cement, 115 million cubic meters of lumber and many other valuable materials are used here every year. With such great material expenditures a savings of even one percent provides a huge effect. Here are examples. By saving one percent of the total amount of metal that goes into capital construction we will be able to make about nine million square meters of additional components for building panel housing units. Conserving one percent of the cement used at construction sites in the country is sufficient to produce the ties needed to build a railroad extending from Brest to Vladivostok or to build a hydroelectric station equal to the capacity of the Nurek GES.

These and other figures convincingly speak of the importance and urgent necessity of using all potentials to strengthen the economic system and of battling against bad management and waste. The efficient use of material and technological resources has become one of the trends in improving the efficiency of capital construction. Organizational and technical measures have been worked out in all construction ministries and departments. They include an appraisal of design and estimate documentation having the aim of searching for potentials, perfecting technology and the methods of organizing construction and installation work and providing materials and technology on the basis of complete deliveries of materials for projects under construction, and introducing the latest products and lightened components into production. The battle for conserving various types of resources will become an indispensable item in the socialist obligations of the many construction collectives and workers in construction industry enterprises and design and scientific research institutes.

An all-union public examination of the use of raw materials, materials, and fuel and energy resources, which has been declared by the AUCCTU, the Komsomol Central Committee and USSR Gossnab, is being actively conducted in the sector. The leading collectives are taking on increased obligations for economy and thrift and are successfully realizing them.

Practice shows that 80 percent of the savings in building materials is generated by means of more advanced design approaches and 20 percent directly at the construction sites. The TsNII [Central Scientific Research Institute] of Design for Steel Components, the Moscow Construction Design Institute and the TsNIIEP [Central Scientific Research Institute of Experimental Design] for Entertainment Buildings and other institutes were the initiators of socialist competition among designer collectives for the conservation of material and technological resources. Their active creative search has already given perceptible results. Thousands of tons of metal were conserved during the first half of the current year thanks to the adoption of economical designs in production that were worked out by the leading institutes.

Design Institute No 2 in USSR Gosstroy is successfully fulfilling the socialist obligations it has taken on. Substantial changes were introduced for substituting metal in reinforced concrete components during construction of a forging and spring shop and a container fabricating building in the Abakan railroad car building plant based on proposals by designers. More than 300 tons of metal were conserved. The use by this same institute of steel ribbed decking in the roof instead of reinforced concrete slabs having a total area of more than 8,000 square meters during reconstruction of a large panel housing construction plant in Novorossiysk, a combine for assembling and dismantling buildings in the USSR Ministry of Geology in Sayanogorsk and other projects made it possible to conserve 1,297.5 tons of cement. The state was saved more than 752,000 rubles.

Competing with other related collectives the Scientific Research and Design Institute for Industrial Transportation is also successfully fulfilling the obligations it has taken on. Designers saved 200 tons of metal and 500 tons of cement just by working out design and estimate documentation for building the roads for one of the enterprises.

An extensive use of the research and developments by PNIIS [Expansion unknown] in practical work is planned to be a part of the socialist obligations of the Hydraulic Pipeline Institute. Thanks to implementing this item designers saved more than 2 million rubles. During the past year collectives of institutes and organizations that are under the jurisdiction of USSR Gosstroy made about 4,000 proposals for conserving material resources during the course of the socialist competition. This made it possible to save millions of rubles and improve the effectiveness of capital investments. The creative search continues.

Competition is not just labor rivalry. It is also perfecting organizational work that is aimed at improving the creative activity of designers and builders and at quickly adopting the achievements of science and technology in production. And it was no accident therefore that the indicators for completing the plans for new technology and economizing material and technological resources are estimated to be on a level with others when summing up the results of the socialist competition between the sector collectives. The economic effect from meeting the goals of the state plan for economic and social growth in the USSR during 1980 for adopting advanced technology and improving the technical and economic standards of production in construction amounted to 740 million rubles and the cost of construction and installation work was reduced relative to the plan by 712 million rubles. In all 63,000 people were conditionally freed.

The list of measures and indicators in the state plan for economic and social growth in the USSR for 1981 was substantially revamped in comparison with the plan for last year. More than 40 percent of the 135 indicators are included in the plan for the first time. Of those 30 are for developing new types of industrial products, 22 for adopting advanced technology and 6 for primary technical and economic indicators. Designers must place an emphasis on increasing the use of plastic pipes by 33.3 percent and efficient shapes of rolled metal by 4.7 percent etc. wehn working out designs.

Just what large potentials are still available in this direction is evident from the following example. Calculations show that during the current five-year period it is possible to save 15 to 20 million tons of metal pipes--the approximate annual level of production at the present time--thanks to replacing them with polymeric ones. The fruitful efforts of the participants in the socialist competition are needed here including that which is based on personal creative plans.

Creative cooperation between designers, builders and installers based on the principle of "Worker Competition," where production workers try to adopt technical innovations that have been proposed by designers as quickly as possible, promises perceptible benefits. With such an arrangement of affairs the effect achieved from the socialist competition will be mutual. For example, more than 3,000 kilometers of glass pipes will be used to build a number of enterprises during the year based on the proposals of designers in organizations under the USSR Ministry of Transportation and Special Construction which will replace approximately 11,000 tons of steel pipes.

At the same time the newest developments are often adopted in production too slowly. Certain institutes do not give sufficient attention to the problems of reducing material consumption in construction when organizing socialist competition. Such collectives, obviously, should have reviewed the socialist obligations for the current year that were taken on previously and fixed stepped up goals for themselves for adopting modern design developments.

Competition for economy and careful consumption of resources has expanded during the current year among all the collectives in construction and installation organizations. The Main Omsk Industrial Construction Enterprise is achieving consistent successes in it. The long term "Material Capacity" program is in operation here and it is not only the large subdivisions that have obligations to conserve but also each brigade. The results of fulfilling these obligations are summed up regularly and the expertise of the foremost people is extensively propagated. Last year the main administration's subdivisions conserved more than 6,700 tons of metal, almost 22,000 tons of cement, 11,000 square meters of glass, 2,500 cubic meters of lumber and quite a few other materials. The average indicators of savings for the first months of the current year are even higher. The results of the competition for savings are noticeable in the collectives of the Vostokmetallurgmontazh, Apatitstroy, Sokolovrudstroy, Volgogradgrazhdanstroy, Donetsksel'stroy and other trusts.

The brigade contract is an important factor in effective and active socialist competition for the skillful use of internal potentials at construction sites. Its effectiveness is well evident in the example of the results of N. A. Zlobin's brigade who was the initiator. In the ten years since the introduction of the advanced method this collective saved more than 310,000 rubles including a savings of 63,000 rubles for materials. N. A. Zlobin's brigade has many followers. Where 34,000 brigades armed themselves with this method by the beginning of the 10th Five-Year Plan and about 12 percent of the volume of work per year was completed by them, at the present time more than 80,000 brigades use the brigade contract in construction completing more than 38 percent of the volume of work. A colossal economic effect is being achieved by this. Cost accounting brigades gave the state more than 1.3 billion rubles of profit over four years of the 10th Five-Year Plan alone. The construction and industrial building materials workers' trade union central committee together with the "Trud" newspaper organized an all-union socialist competition in 1981 among the collectives of trusts and housing construction combines for the massive adoption of the brigade contract. Competition was organized among the leading cost accounting brigades in the sector.

Collectives in organizations under the USSR Ministry of Construction of Heavy Industry Enterprises have taken on increased socialist obligations during the current year for adopting brigade cost accounting and for achieving the highest economic indicators along with this. They decided to complete 72 percent of the housing, cultural and everyday construction work, no less than 37 percent of industrial construction work and no less than 60 percent of agricultural work by the brigade contract method. These collectives are reinforcing their great obligations with appropriate organizational work. Labor successes were registered during the first months of the year in the Main Krasnoyarsk Construction and Main Murmansk Construction collectives, in the Lipetsk Construction and Magnitogorsk Construction Trust and many others. It is important to consolidate the results that have been achieved and to approach the end of the year with high indicators in the socialist competition. Many workers in the sector are following the example of the foremost collectives in the sector. Socialist competition on a mass scale creates the prerequisites for fulfilling the planned obligations--to increase the amount of work using the brigade contract by 15.3 percent in 1981 and to achieve a substantial savings of materials and means on this basis.

Long-term programs for adopting the brigade contract have been worked out or are being worked out in a number of ministries and departments in combination with the socialist obligations of the collectives to fulfill the proposed plans ahead of schedule. For example, the "Contract" program in the USSR Ministry of Industrial Construction, which was revised to take into consideration the requirements of the 26th CPSU Congress, specifies that no less than 60 percent of the volume of construction and installation work be completed by N. A. Zlobin's method by the end of the five-year plan. By this means it is planned to increase labor productivity by 4.29

percent, reduce the estimated cost of work by 42 million rubles and conditionally free no less than 18,000 workers. The technical and economic estimates are being supported by stepped up socialist obligations for the labor collectives. This is a guarantee that that which is planned will be brought to fruition.

It is important to strive to perfect the methods of adopting brigade cost accounting and to more fully utilize the expertise of the leading collectives in industrial, housing construction and agricultural construction.

In recent years construction in our country is gradually being transferred to the flow method of doing work. This is very clearly evident in the example of organizing housing construction. More than 460 housing construction enterprises with a total capacity of more than 55 million square meters of total area in housing units are now operating in the country. The relative proportion of completely prefabricated housing construction of the total amount of state and cooperative housing construction comprises approximately 55 percent including more than 60 percent of the urban construction. According to data by the USSR TsSU [Central Statistical Administration], over the last 20 years the cost of large panel housing units is 10 percent lower than the cost of brick ones on the average, and the large panel housing units having a total area of more than 500 million square meters that were built during this period have provided a savings of more than 7 billion rubles.

However, due to a number of reasons, the goals that were planned for the volume of completely prefabricated housing construction were not completely met during the past five-year plan. With its complete realization it would have been possible to obtain a savings of capital investments in housing construction amounting to approximately 170 million rubles, reduce the average annual number of workers by more than 9,000 people and put more than 8 million square meters of total area into use. Increasing the coefficient of use of the capacities of completely prefabricated housing construction enterprises from 0.81 to 0.90 for the sector as a whole would have made it possible to manufacture an additional number of products for building housing units amounting to about 5 million square meters of total area per year, to save about 100 million rubles by this means and to reduce the average annual number of workers in construction by approximately 30,000 people.

The low level of use of production capacities in completely prefabricated housing construction is a result of accepting housing construction enterprises for use for which construction has not been completed and the low quality of equipment, forms and rigging.

The best housing construction collectives are competing for a more full usage of factories that are operating, and for a reduction in the cost of 1 square meter of housing floorspace. Collectives in the Donetsk DSK No 1 [Housing Construction Combine No 1] Tallinn, Khar'kov, Irkutsk and other housing construction combines have achieved good results. The experience of the organizations in the socialist competition for economy and thrift at the Moscow DSKs, whose collectives are not called the school of advanced construction expertise and the school of economical and skillful management for nothing, deserves special attention. And this is supported by the nature of organizing work and socialist competition, and the system of measures of moral and material incentives for the foremost people in production.

The battle for a reduction in the cost of building housing permeates the socialist obligations of all participants in the technological production organizational structure. For example, the collective in the Bureau of Design Expertise under the Main Moscow Construction Administration is obligated to put only those new designs into production in which all the indicators are more efficient than in the ones being used. This is the main item in their obligations. And it is systematically being fulfilled. Over the last two and a half years this bureau of expertise reviewed 214 designs for buildings intended for various purposes. Improtant observations that were considered by the designers were introduced. As a result the consumption of cement was reduced by 5,600 tons, rolled ferrous metal by 400 tons and the use of wet plaster was replaced by a dry method of finishing amounting to 400,000 square meters.

Concrete workers are taking on stepped up socialist obligations. In recent times a uniform brand of concrete for roof panels--250 instead of 300--has begun to be produced for erecting housing units in the capital that have a greater number of stories. The quality was not reduced yet the production of the new panels at the Tushinskiy and Vostryakovo plants made it possible to reduce the consumption of cement by more than 1,000 tons per year.

New panels for interior walls and partitions for the upper floors of housing units will also be used during the current year without reducing the quality. Their thickness was reduced from 180 to 140 mm. By means of this alone more than 400 tons of cement are economized a year when erecting 16-story buildings in the new series. The work of housing construction workers in the capital over the first months of the new five-year plan shows that they are successfully meeting the obligations they took on.

In everyday practice construction workers often do not notice so-called "minor details." Muscovites strictly take them into consideration. There is the following item in the obligations of housing construction workers: "to transport cement only in special railroad cars and motor vehicles." Its significance is very great. It was calculated that if a layer of cement 0.5 centimeters thick in all remains on the bottom of a typical railroad car when unloading (and this happens very often), the losses amount to 180 kilograms. Fifty railroad cars, on the average, are part of a train. Consequently, when unloading it up to 9 tons of critical cement are lost. With the huge scale of use of this valuable material at construction sites in the country and in the industrial construction industry the losses amount to tens of thousands of tons. Look what potentials can be put into action just by one of the items in the socialist obligations!

Participants in the competition at Moscow DSKs are searching for other potentials of economizing materials as well. In particular, a method of introducing chemical compounds when producing concrete at the Tushinskiy and Rostokin plants, which was recently adopted by them, will make it possible to economize 400 tons of cement per year. Such production is also being organized at other concrete plants in the capital. Much attention is being given to preserving materials. All deliveries are made according to weekly and daily schedules that are worked out by EVM (computer) for each building under construction. The use of containers having various shapes and special pallets is ensuring that materials and other products will be completely preserved during transportation and loading and unloading operations. At the present time there are more than 26,000 containers and pallets in the Main Moscow Construction Administration. They are all being maintained in the proper order. This is also of no small importance.

Today, the flagship of socialist competition among the Moscow housing construction workers is the DSK-3 collective. Responding to the resolutions of the 26th CPSU Congress it has taken on new, greater obligations for 1981. Problems of economizing raw materials, material, technological, fuel and energy resources occupy a special place in them. This work was done during the 10th Five-Year Plan also and the housing units with 190 apartments that were built above the plan by means of conserved materials is an obvious incentive for it for the leading workers and the engineering and technical personnel in the DSK.

The expertise of the best people is the most valuable commodity and it must be propagated as extensively as possible in the battle to implement the resolutions of the 26th Party Congress. Economizing raw materials, materials, fuel and electricity are among the principal goals on which the efforts of the competitors should be concentrated, as noted in the CPSU Central Committee USSR Council of Ministers, AUCCTU and Komsomol Central Committee decree "Concerning the All-Union Socialist Competition for a Successful Fulfillment and Overfulfillment of the Tasks for the 11th Five-Year Plan." It is a matter of honor for all the sector collectives to be actively included in the movement for the economical and thrifty consumption of resources and to make it one of the main trends in socialist competition.

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ENSURING EFFICIENT USE OF MATERIAL RESOURCES STRESSED

Moscow EKONOMIKA STROITEL'STVO in Russian No 7, Jul 81 (signed to press 3 Jun 81) pp 33-36

[Article by N. T. Arkhipets, deputy chairman of USSR Gossnab: "Regulate the Use of Material Resources in Construction"]

[Text] Construction production is a very complicated production management system that interacts with all the sectors of the country's national economy. Such a system can be successfully managed in all its forms and directions of its activities only on the basis of an effective, precisely operating economic and financial mechanism. This mechanism must regulate the variations that originate when completing construction production while simultaneously making adjustments in the mechanism itself.

In accordance with the party and government's decree that was approved in 1969 a transition of construction and installation organizations to new conditions of planning and economic stimulation took place and a number of economic experiments were done almost simultaneously in several territorial construction organizations. During the course of the experiments the effect of the total economic and financial measures was examined which even under the conditions of incompletely balanced plans for construction and installation work with the material resources singled out provided a substantial economic effect, provided a reduction in the length of construction, accelerated the start-up of operations for production capacities and projects, reduced the volume of incomplete construction, etc.

The fundamental essence of the experiments that were conducted to improve the economic and financial mechanism in the activity of construction and installation organizations and enterprises in the construction industry came to an acceleration of the start up of capacities and projects and to obtaining the final (commodity) construction production as quickly as possible. The CPSU Central Committee and USSR Council of Ministers decree dated 12 July 1979 "On Improving Planning and Strengthening the Influence of the Economic Mechanism on Increasing Production Efficiency and Work Quality," which was laid as the foundation of work for all construction and installation organizations beginning with the 11th Five-Year Plan, was a recognition of the effectiveness of this expertise.

The topic is about the overall system of engineering, technical and economic measures and indicators that promotes an improvement in the use of material, technical and labor resources, the transition of construction and installation organizations to cost accounting, credit for incomplete construction production, planning economic and technical indicators depending on the output of commodity (finished) construction production, perfecting planning and estimates of labor productivity in construction and obtaining profit.

Irrespective of the results of the work of construction organizations under the operating conditions of this mechanism it must be guaranteed that profits go to the state budget and this means that in order to maintain the economic indicators for the economy at the optimum level, to develop it and to finance the expenditures needed for construction and installation organizations' personal consumption it is necessary to work very profitably and economically stably. The results of the activity of this economic mechanism must, in our opinion, lead to obtaining an average annual growth in the volume of commodity construction production amounting to, at the very least, no less than 10 percent, provide an operating profit in the 8 to 10 percent range and a growth in labor productivity of 6 to 7 percent per year.

Construction and installation organizations will be able to achieve such indicators under conditions of balanced planned goals for material resources and technological and energy producing equipment, labor and financial resources and also the capacities of organizations, the use of new technical approaches, an efficient use of the material resources that have been allocated, reliable management of the construction process, etc.

The adoption of this mechanism in construction production practice has not only an organizational, technical and economic character but also a social one and it has importance for the national economy.

It is necessary to dwell more in detail on the problems of perfecting the provisions of materials and technology for construction under the conditions of the improvement of the economic mechanism that was done.

It should be noted that the system of providing capital construction with materials and technology that is in operation in the country at the present time does not ensure the necessary concentration of material resources which is the most important national economic problem during the transition of construction organizations to evaluating their activity based on the commodity construction production indicator. This is explained, first of all, by the fact that the method of completely providing material and technological resources when manufacturing industrial products, which is used in industry and has justified itself in practice, for example, when manufacturing motor vehicles, tractors, televisions, etc. and which consists of the technological level of the material and technological supplies, their completeness and a strict observance of the practices regarding complete provisions relative to time, is not being used in construction. Such an approach to providing materials and technology during the construction of projects would have changed the situation with preparing starting projects. But there is still no such mechanism and effective economic and administrative responsibility for completely providing material and technological resources on time and using them efficiently is lacking on the part of the state agencies for supplying materials and technology and the construction and installation organizations themselves.

We will apply the system used by planning agencies for allocating material resources per one million rubles of construction and installation work that is now in force only at the state planning agency level and for balancing plans for construction and installation work and supplies on the scale of USSR construction ministries and departments. This procedure is totally unsuitable for the specific goals of commodity (finished) construction production output. In reality there are continually hundreds of thousands of projects in construction production when completing the almost 70 billion rubles of construction and installation work in the country every year. For example, there were more than 360,000 projects intended for production purposes in the plan for 1980 alone. At the same time there was no specific estimate of the demand for building materials, products and components since the beginning of construction or their actual consumption at any of the projects under construction. The allocation of resources is done for the total volume of work for the organization as a whole and the estimate of their consumption is also done in approximately the same way.

The question really arises: Is it possible to organize complete effective supplies by product type for starting projects, provide them with complete guaranteed supplies of material and technological resources and ensure their economical use with such a situation in construction affairs? In our opinion this is the main reason that the plans for construction and installation work for starting projects are not balanced with the material resources being allocated. The resources that are received at the construction site (although there are instances where they are insufficiently allocated) are not purposefully distributed, even inefficiently, and in certain cases unreasonably. The lack of estimates of material requirements by project leads to starting projects not being provided with them and to directing resources for stockpiling projects. As a result every year 500,000 to 600,000 tons of rolled metal, 1.5 to 2 million tons of cement and a large amount of other building materials are diverted toabove normal incomplete construction production. Approximately 5 million tons of rolled metal, 25 million tons of cement, 14 million cubic meters of lumber and substantial amounts of other materials were frozen in above normal incomplete construction and construction production at the beginning of 1981. With such a situation the viewpoint that exists about reducing the planned norms for material consumption by 3 to 5 percent becomes unconvincing since the material resources that are diverted to above normal volumes of incomplete construction production amount to 6 to 8 percent of the annual demand.

In the mechanism for perfecting capital construction management the function of supplying it with materials and technology has always occupied and now occupies one of the determinative and leading positions. In order to correct the deficiencies that were stated above it is necessary to create such a system for supplying capital construction with materials and technology that would confidently work toward the final (commodity) construction production and would ensure a reduction in the entire increasing volume of above normal incomplete construction production in which substantial material resources are immobilized.

In order to induce construction and installation organizations that supply materials and technology to work toward the final (commodity) construction production, it is necessary to first of all solve the problems of ensuring the technological feasibility of the material and technological supplies, their completeness and delivery on time to the projects under construction. This system of providing materials and technology must work in close coordination with the technological process of construction production.

One of the principal ways of ensuring a reduction in the deficits for many material and technical resources in capital construction is to stop immobilizing material resources in above normal incomplete construction production.

In our opinion the basic condition for balancing the plans for construction and installation work with the material resources allocated for these goals is not only the amount of resources allocated but also their proper and economical use. Unfortunately, up to the present time there is no estimate of the demand for materials and components by project and also no comparisons with their actual consumption being done in the entire capital construction system. It can be proven that the creation of a system of estimating the demand and consumption of material resources for construction by project should be the basis of balancing the plans for capital construction with the materials and technology that are provided.

In order to create such a situation in construction production and with the goal of improving its material and technological provisions it is necessary in our opinion:

for construction ministries and departments to organize estimates of the demand for the primary building materials by project since the beginning of construction and their actual consumption in all construction and installation organizations in the shortest possible time, directing materials first of all to building starting and very important projects;

for USSR Gossnab territorial agnecies to form the necessary stockpiles of rolled metal, pipes, cement, lumber, roofing, and other materials completely and in a wide variety in amounts approximately up to 30 percent of the annual available assets to be used in capital construction. These stockpiles must satisfy the peak demand for these resources over the course of the year that are inevitably a result of the specific nature of construction production;

for USSR Gossnab agencies to form engineering groups in all its subdivisions that are capable of skillfully solving the problems of economizing materials in capital construction and also of concentrating material resources in important decisive areas of construction production.

It is also necessary to change the viewpoint which, unfortunately, exists in construction and installation organizations and even in several supply agencies that the primary purpose of the system of supplying materials according to demand which is determined on the basis of design and estimate documentation consists of allocating additional material resources above those that are obtained from the available assets. This is an incorrect erroneous point of view.

A single central system of available assets is in operation in the country, with the assistance of which material resources are distributed to consumers and asset holders through planning agencies. All problems of balancing the capital construction plans with material resources are also solved by planning agencies, consumers, and asset holders (construction ministries and departments) at the stage when the national economic plan is drawn up. After this the main task of USSR Gossnab and its agencies at the locales in collaboration with construction and installation organizations consists of using the material resources that are allocated more efficiently and economically, arranging for them to be shifted around flexibly and extensively so that even under conditions of shortages for certain material resources a possibility can be found of concentrating available materials and products at the decisive areas of capital construction that are the most important for the national economy.

The resolution specified by the CPSU Central Committee and USSR Council of Ministers dated 12 July 1979 concerning the completion by USSR Gossnab by 1981 of the transition of construction sites that are included in the state plan for capital construction to be completely supplied with materials through territorial agencies for material and technological supplies based on the orders of construction and installation organizations in accordance with their requirements as determined by designs and estimates must be more rapidly implemented. For this USSR Gosstroy, ministries and department-clients must ensure that data concerning requirements for materials, components and parts are worked out as a part of design documentation which is also specified by the above-mentioned decree.

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WAYS OF CONSERVING FERROUS METAL DISCUSSED

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[Article by E. G. Kutukhtin, candidate of technical sciences and V. S. Il'in, N. F. Malikov, and V. M. Spiridonov, engineers: "Ways of Conserving Ferrous Metal"]

[Text] Solving the problems of the economic and social development of the country, as decreed by the 26th CPSU Congress, requires large means and material and technological resources including metal as well. Obtaining the greatest return from all of these investments is a necessary condition for successfully bringing the party's plans to fruition.

To manage economically--this means first of all saving metal.

"We will, certainly, put new metallurgical capacities into operation. But another way exists of overcoming the deficit in metal--more skillfully and completely utilizing that which is being produced," emphasized comrade L. I. Brezhnev at the 26th CPSU Congress.

Zealous use of steel has become one of the indicators of efficiency in the design approaches that are accepted and an important component part of the problem of improving the technical and economic standard of construction.

The results of the 10th Five-Year Plan testify to the fact that the proportion of prestressed reinforced concrete components in the total volume of reinforced concrete being used in construction amount to 24 percent while components from lightweight concrete amounted to 19 percent. Advanced types of materials have begun to be used more extensively, the annual use of efficient brands of steel increased by a factor of 1.5 and by a factor of 2.6 for economical shapes of rolled metal and the amount of low-alloyed reinforcing steel being used increased. The factors cited made it possible to reduce the standards for the consumption of metal per 1 million rubles of construction and installation work by 5.3 percent. As a result its total consumption in construction (that was completed by means of state capital investments, funds from housing construction cooperatives and public organizations) was reduced by 1.3 million tons in comparison with 1975.

The reduction in steel consumption was a result of perfecting design approaches, improving the organization and technology of manufacturing, transporting and installing construction components, more extensively using efficient shapes of rolled metal and brands of steel and is a result of using metal substituting materials only to an insignificant degree.

During the 11th Five-Year Plan 7 to 9 percent of the metal in construction, or about 2 million tons, must be conserved. The principal ways of zealously using steel are still the same as they were in the preceding period. And the most efficient of them are the extensive use of economical shapes of rolled metal and steel with increased strength.

At the present time the proportion of rolled metal that is manufactured from increased and high strength steel comprises only 18 percent in the pattern of metal products that are being used to produce steel components. By 1985 the delivery of increased and high strength steel to capital construction must substantially increase: its volume of use will comprise 26 percent of the total amount of rolled metal. As a result the standards for consuming metal per 1 million rubles of construction and installation work will be reduced by 3.3 percent in comparison with 1980. This will make it possible to conserve more than 900,000 tons of rolled metal.

A change in the structure of capital investments and a decrease in the proportion of expenditures for construction and installation work for projects intended for production purposes from 46 to 38 percent and those for non-production purposes from 86 to 77-81 percent will lead to a reduction in the relative amounts of metal in construction. The proportion of capital investments for construction and installation work on the whole will be reduced from 54.5 to 48.6 percent.

Reducing the amount of metal during construction of industrial enterprises will be furthered first of all by using advanced production technology and modern equipment. It is precisely this that will make it possible to reduce the volume of construction and installation work per unit of capacity, to avoid creating superfluous amounts of and work space in industrial buildings and the overconsumption of building materials.

The main trend in developing techniques that aid in reducing the fabrication area of production buildings is an increase in the individual capacities of units. For example, the use in the chemical industry of units for producing ammonia having an individual capacity of 450,000 tons per year instead of units with a capacity of 110,000 tons makes it possible to reduce the consumption of metal for construction components by 1,800 tons. This principle is characteristic for the majority of sectors of industry.

The volume of construction and installation work required to erect industrial enterprises should also be reduced as a result of the conversion to installing equipment outside of buildings. For example, setting up semi-open evaporating units when producing cellulose makes it possible to reduce both the amount of construction and installation work and the consumption of metal. Twelve to thirteen hundred tons of it are conserved at one evaporating station with a productivity of 150 tons per hour (based on the moisture evaporated).

USSR ministries and departments are reviewing the lists of technological equipment that should be installed in open areas (a number of ministries have already completed this work). The products list is being expanded considerably. This process, however, must be continued even further.

An important factor in reducing the consumption of metal in construction is consolidating enterprises into industrial centers. This, in addition to a reduction of 2 to 3 percent in capital investments on the average, makes it possible to reduce metal consumption in construction by 1 to 1.5 percent. Increasing the proportion of enterprises that are built as part of industrial centers to 30 to 40 percent will make it possible to reduce metal consumption by 30,000 to 50,000 tons per year.

Substantial potentials for conserving metal, as inspections of the work of organizations in a number of ministries and departments testify, are contained in improving design approaches. For example, it would have been possible to reduce the estimated cost of construction by almost 15 million rubles and reduce the consumption of steel by more than 20,000 tons for just those particular designs that were examined in 1980. When this was done, the greatest potentials were uncovered in the design documentation for non-specialized organizations. The consumption of rolled metal, for example, could have been reduced by 540 tons in the designs for transportation projects that were worked out by the Kuybyshev Industrial Construction Design Institute and other institutes in the USSR Ministry of Industrial Construction and it could have been reduced by 3,600 tons in the design for an urban sewerage system that was created by the Ukrainian State Institute for Design and Construction of Utilities. Five to seven percent more steel goes into metal structural components that were developed by non-specialized design organizations than by specialized ones. Examinations have shown that 1 to 2 percent less steel could have been used for all the designs that were reviewed.

Substantial potentials for conserving metal can be utilized thanks to the perfection of design methods, an improvement in the standard base, technology and organization of manufacturing and installing structural components. In order to meet the goals for conserving metal in construction that have been established in the primary directions of economic and social growth in the country it is necessary to use advanced spatial planning and structural approaches more extensively during design work and construction. In particular, the sphere of use and zones of activity of overhead cranes should be limited by substituting them with other types of hoisting and transportation equipment, effective loadbearing and enclosure components of high factory preparedness should be more extensively used, built-in facilities for various purposes should be arranged from modular sections and elements with large dimensions, utility lines should be laid outside of buildings, and monolithic reinforced concrete, and prefabricated reinforced concrete components made from concrete with porous fillers and others should be more extensively used.

The use of metal in construction based on a unit of production capacity at enterprises should be reduced by 2 to 3 percent by 1985 as a result of perfecting the methods of planning and design approaches.

The classification of buildings and structures according to dependability relative to the national economic importance of the projects, their conditions of use and the economic risk associated with attempting to obtain structures with optimum properties, which has been approved will serve to reduce the consumption of metal. In accordance with the classification that has been adopted by USSR Gosstroy all buildings and structures are subdivided into individual groups; a general coefficient of dependability has been established for each of them. Reducing the coefficients of dependability at the same time for projects that are less important and crucial will make it possible to conserve more than 5 percent of the material resources during their construction.

In recent years native metallurgical industry has begun to turn out rolled metal with greater physical and mechanical properties and supply it in accordance with the requirements of state standards and specifications. This makes it possible to more fully utilize the strength properties of metal in components and reduce the consumption of rolled metal in this manner when manufacturing them. In order to utilize these capabilities USSR Gosstroy has approved a resolution about improving the standard estimated strength of rolled metal by no less than 5 percent on the average when designing structural components for industrial, agricultrual, housing and civil construction (the value of the safety factor for the material was reduced and a more complete utilization of the physical and mechanical properties of the metal was specified depending on the brands and classes of steel). As a result the savings began to reach 10 percent in certain cases.

USSR Gosstroy, GKNT [expansion unknown] and USSR Gosplan have approved an overall special-purpose scientific and technical program and 11 very important scientific and technical programs for construction for the 11th Five-Year Plan. In accordance with these documents new typical durable loadbearing and enclosure components should be developed from high strength heavy and light concrete while using efficient types of reinforcing steel. More than 30 million cubic meters of new efficient reinforced concrete components are scheduled to be used in all in construction during 1981 to 1985 with a reduced consumption of metal of 10 to 15 percent on the average.

New improved metal components for industrial building frames using less metal are specified to be adopted in construction which will be manufactured from efficient brands of steel and efficient shapes of rolled metal including those made from steel with a consistency limitation of 60 to 85 kg · second/mm^2, corrosion resistant steel with a consistency limitation of no less than 35 kg · second/mm^2, hot-rolled thin-walled I beams and channels, wide flanged I beams and T beams, curved welded shapes, etc.

It is proposed that the components be studied in practice in order to improve them further.

The development and adoption of new types of glued wooden components for industrial, agricultural and public buildings, asbestos cement products of various configurations and purposes (slabs, panels, channels, window sill and others), and new types of enclosure structures manufactured by using plastic and other building materials with increased fireproofing properties, which make it possible to conserve metal, is continuing during the current five-year plan in accordance with the overal special-purpose program.

As calculations show, completing the work that is specified by the overall special-purpose program will make it possible to conserve more than 500,000 tons of metal by 1985 in comparison with 1980.

The use of materials that are metal substitutes is an important way of reducing the use of metal in construction. However, construction workers cannot utilize the reserves that are being freed here--it is clear that insufficient amounts of flat and corrugated asbestos cement sheets, extruded asbestos cement panels, plastic products, glue for manufacturing glued wooden components and water resistant veneers are being allocated to them. More efficient and economical shapes of rolled metal and brands of steel are being allocated to construction workers in small amounts.

Substantially large potentials for conserving metal are contained in perfecting the process of manufacturing structural components. Tests that were conducted by USSR Gosstroy organizations are continually verifying this. For example, losses of reinforcing due to an imperfection in production technology reached 9.4 percent at the Nelidovo plant, 9.3 percent at the Akhmeta Building Materials Combine and 8.1 percent at the Petropavlovsk ZhBI [Reinforced Concrete Products] Plant of the total amount of steel consumed to manufacture reinforced concrete components.

Every year 400,000 tons of metal are overconsumed at prefabricated reinforced concrete plants during reinforcing work due to inefficient substitutions when the required diameters and grades of steel needed are lacking.

With the goal of preventing the overconsumption of steel when designing and manufacturing reinforced concrete components the assortment of reinforcing steel was limited. In addition all design organizations have been directed to primarily use standardized reinforcing frames and mesh when working out drawings for reinforced concrete components.

In accordance with the measures that were outlined by USSR Gosstroy construction ministries must form specialized plants for centrally manufacturing standardized reinforced products and also bases for centrally supplying reinforcing to reinforced concrete plants and construction sites. As a result the loss of metal will be reduced by one half.

One of the potentials for conserving metal is to utilize defective reinforced concrete products. Their volume, based on reported data, reaches 1.5 to 2 percent.

As an inspection of metal components plants in a number of ministries and departments has shown quite a bit of metal is overconsumed as a result of late deliveries of rolled metal, the delivery of metal in unmeasured lengths and also due to delays in transmitting design documentation to plants which leads to a substitution in the shapes that are specified by the designs to heavier ones. Eliminating such a situation and consequently, preventing the overconsumption of metal should aid the transition to the system of centralized deliveries of metal products in the required variety from territorial metal sales bases.

An unjustified waste of rolled metal occurs due to the non-observance of the established norms for the consumption of metal and to the inefficient layout of metal for cutting at small and non-specialized plants. Therefore, in the near future it is necessary to work out and put into operation uniform standards for the consumption of rolled metal according to the principal groups of metal structural components. At the same time the indicators for metal consumption should be calculated at the leading enterprises and large plants. It is also important to create a line for manufacturing corrugated pieces without waste with the aid of contact welding machines.

The consumption of rolled ferrous metals in construction can be reduced by more than one million tons by 1985 as a result of using the above mentioned potentials associated with perfecting design approaches, the standardized base, and the technology and organization of manufacturing and assembling components.

A certain reduction in the use of metal in construction can be achieved thanks to a reduction in the mass of buildings and structures as a result of using advanced lightened components and efficient materials. By this means the mass of buildings can be reduced by 60 to 70 million tons on the whole.

Based on calculations by the TsNII [Central Scientific Research Institute] for Industrial Buildings substituting layers of foam having a volumetric mass of 30 to 40 kilograms per cubic meter in reinforced concrete roof slabs for the insulation that is now being extensively used, which has a volumetric mass of 500 to 600 kilograms per cubic meter, will make it possible to reduce the consumption of reinforcing steel to 1 kilogram per 1 square meter of roof. This will be equal to approximately 17,000 tons of steel per year.

All that was mentioned above testifies to the fact that potentials for conserving metal are extremely great in construction. The efforts of all participants in construction should be directed toward utilizing them.

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CONSTRUCTION MINISTER REVIEWS PAST ENVISIONS FUTURE OF CONSTRUCTION

Kiev STROITEL'STVO I ARKHITEKTURA in Russian No 8, Aug 81 (signed to press 29 Jul 81) pp 1-2

[Article by G. K. Zlobin, chairman of UkSSR Gosstroy: "9 August--Builders' Day"]

[Text] During the current year our country's builders are observing their holiday under circumstances of great labor and political activity which was brought about by the historical decisions of the 26th CPSU Congress. Under the leadership of the Communist Party our people are solving the urgent problems of developing socialism--problems of accelerating scientific and technological progress, improving production efficiency and work quality and of the maximum utilization of intensive growth factors for ensuring a balanced development of all sectors of the economy in the name of further improving the welfare of the people.

General Secretary of the CPSU Central Committee and Chairman of the Presidium of the USSR Supreme Soviet comrade L. I. Brezhnev pointed out at the 26th Party Congress: "The new five-year plan will be an important examination for builders. Its characteristic feature is the concentration of resources in every way possible to complete and start up as fast as possible those enterprises that are capable of providing the greatest growth in production and of mending the tight spots. We have already taken this course and it must be strictly followed."

The Ukrainian SSR is confidently moving forward together with all its brother republics. Capital investments in the republic's national economy comprised 93.9 billion rubles during the 10th Five-Year Plan or 19.6 percent greater than for the previous five years. Fixed assets increased by 71.2 billion rubles or by a factor of 1.3. One hundred and fifty large modern industrial enterprises and about 1,900 production projects and capacities went into operation.

The 10th Five-Year Plan had no equal in the scale of housing construction. In all 12.4 billion rubles were allocated for these purposes in the republic or 237 million rubles more than was projected by the five-year plan. Housing units with a total area of 91.4 million square meters were built in cities and villages which made it possible to improve the living conditions of almost 8 million people. Hundreds of schools and kindergartens and many medical institutions and projects intended for municipal, trade, cultural and everyday purposes were put into use. Much work was done to improve the planning and construction of cities and to totally reorganize inhabited rural areas.

In recent years a number of measures have been carried out that are intended to develop the material and technological base of construction production, to improve the effectiveness of capital investments and to reduce construction time. The relative proportion of completely prefabricated construction increased by 25 percent in comparison with 1970 and comprises 56.6 percent while the relative proportion of large panel and modular section construction increased from 41 percent in 1970 to 60.4 percent in 1980. During the years of the 10th Five-Year Plan new housing construction enterprises were put into operation and the Zhitomir Metal Enclosure Components Plant, keramzit gravel plants in Balakleya, Marganets, and Cherkassy, silicate wall material plants in Slavuta, Sumy and Ladyzhin and other enterprises in the construction industry were built.

The output and development for production of new efficient materials and products is expanding. The volume of prefabricated prestressed components being manufactured reached 3.9 million cubic meters in 1980 and comprised 28.8 percent of the total amount of prefabricated reinforced concrete being produced, load bearing and enclosure components and products from lightweight concrete reached 3.2 million cubic meters and increased by 50.6 percent in comparison with 1975.

For the first time reinforced concrete girder components with a span of 36 meters and reinforced concrete decks with folds from 3 x 6 meter slabs were used in building the Chervonograd Coal Concentrating Mill, the Novovolynsk Special Technological Equipment Plant and the Kiev Carton Factory. During construction of the Dolina Cotton Spinning Factory buildings pan decks were introduced for installing 10,000 square meters of decking as a result of which an economic effect of 300,000 rubles was obtained. The use of 2,600 square meters of new enclosure components made from completely extruded plastic glass panels at the Kiev "Khimvolokno" Production Association provided an economic effect of 480,000 rubles.

The technology of construction production was improved. The amount that rapid modular assembly was used for a complex of technological lines and units that were delivered expanded substantially. This method was successfully adopted for the construction of the Dnepropetrovsk and Severnyy mining enrichment combines, the Odessa Portside Plant and a number of other construction jobs.

An advanced engineering approach was used during construction of a market in Dnepropetrovsk: the structure's decks were installed with the aid of a special hydraulic single unit lifting device with a weight of 500 tons and dimensions of 45 x 69 meters.

Roofing and waterproofing work is being improved by means of transferring to the use of mastic roofs and bituminous emulsions, fused ruberoid and complete tile coverings that are totally factory prepared. By using mastic roofs alone an economic effect in the amount of 3.3 million rubles was achieved during the 10th Five-Year Plan.

The scale of the overall design and erection of industrial centers increased in industrial construction which made it possible to reduce the estimated cost of construction up to 10 percent on the average and to reduce the length of utility lines and networks by 15 percent.

The "Orel continuous planning method," the Vinnitsa method of planning and completely outfitting a consolidated crew and the flow method of doing work spread further in housing and civil construction.

A new form of cost accounting--the brigade contract method--was extensively adopted during the 10th Five-Year Plan. There are many exceptional brigades in the republic that are followers of Zelenogradsk construction workers. These are the collectives that are supervised by Heroes of Socialist Labor I. D. Ganchevyy, I. S. Kravtsovyy, M. P. Kalyuzhna, V. S. Plakhotinyy, G. I. Donets, I. I. Bushma and I. I. Medvedskiy, and by respected construction workers of the republic. M. I. Karlashuk, S. I. Chekalinyy, S. I. Paninyy, P. V. Kruchina, N. A. Stanovich, V. S. Artemenko, and others.

The total amount of construction and installation work that was completed by contract brigades in construction organizations was 41 percent in 1980.

The brigade contract promoted an increase in the efficiency of the construction workers' labor, the creation of a favorable social climate in the collectives and the breeding of an authentic communist attitude to work.

A growth in labor productivity of 1.15 percent was achieved as a result of adopting the brigade contract method which comprises a third of the entire growth in labor productivity in construction by means of organizational factors.

The labor of republic construction workers during the 10th Five-Year Plan was evaluated highly by the party and government. Based on the results of the All-Union Socialist Competition, 2 collectives were awarded ordres and 14 collectives the challenge Red Banner by the CPSU Central Committee, USSR Council of Ministers AUCCTU and VLKSM [Komsomol Central Committee], 29 collectives were entered on the republic's Board of Honor, 41 construction projects and enterprises and 49 crews were entered in the Valorous Labor Book and thousands of the foremost production workers were awarded orders and medals for the high production indicators that were achieved.

Along with this, despite the relatively high organizational and technological standard of construction that was achieved, the goal was not met for growth in labor productivity for the sector as a whole during the 10th Five-Year Plan. Not all construction organizations by far have succeeded in efficiently utilizing construction technology, many are doing a poor job of adopting advanced approaches that provide a substantial reduction in labor consuming work, and there are deficiencies in organizing, planning and providing construction with materials and technology. For example, the relative proportion of prefabricated assembly line industrial building roofs comprised only 3.2 percent, the large modular section assembly of technological equipment 9.1 percent, and complete slab roofs about 9 percent. The advanced "slurry wall" method of erecting underground structures, which makes it possible to reduce the amount of earth work by 30 to 50 percent, completely eliminate the consumption of metal piles, lower the consumption of steel by 20 to 30 percent and reduce the length of construction, has still not been adopted on a mass scale.

The proportion of manual labor is still substantial when doing plaster, painting, roofing, concrete, brick and carpentry work.

Great and complicated tasks stand before the construction workers of the republic during the 11th Five-Year Plan. It is necessary to increase the amount of construction and installation work by 14 to 15 percent by the end of the five-year plan without increasing the total number of workers by means of a growth in labor productivity, an improvement in the level of industrialization, an increase in the degree that components and products are prepared by the factory, etc.

It is planned that the weight of buildings and structures is to be reduced by 1985 by 12 to 14 million tons (6 to 7 percent) by means of introducing lightened components, efficient shapes for rolled metal, lightweight alloys, synthetic, and other advanced materials and products. It is necessary to achieve diversity and improve architectural expressiveness in both mass scale construction projects and individual buildings and structures. The organization of the production of articles having several types of finishes for the facades including ribbed, relief, real brick, and exposed surface facades, and facades sprinkled with decorative particles, etc. at republic housing construction combines is specified for this. It is intended that the amount of improved quality gypsum board sheets used in construction for finishing surfaces and installing partitions is to increase from 1.5 million square meters in 1980 to 2.4 million square meters in 1985. The amount of carpentry items painted and glazed under factory conditions and also those finished with a plastic or polyvinyl coating that are delivered to projects should increase by a factor of 2.3.

Industrial methods of assembling buildings and structures will be further developed—consolidated prefabricated structural components.

Substantial renovation is planned for the machinery yards of construction organizations through new efficient machines with increased individual power. The average individual power of the machines in the equipment yards should be increased by 15 to 25 percent versus the 5 to 7 percent that was achieved during the 10th Five-Year Plan. The level at which construction organizations are equipped with machines and mechanisms for doing finish work, mechanized tools and other small means of mechanization is planned to be increased by a factor of 1.5 to 2.

During the current five-year plan the annual output of primary construction machines should be increased by 10 to 15 percent by means of improving their technological operating standards, reducing idle time during shifts, increasing the interchangeability of operations, and by extensively adopting advanced forms of organizing the work of equipment operators.

It is necessary to give greater attention to problems of improving the entire economic mechanism and the management of production on the basis of consolidating construction subdivisions which will make it possible to create favorable conditions for developing technological specialization, reducing the structural links in management, organizing consolidated territorial and sector construction associations as the primary management link and further developing housing, plant and agricultural construction combines.

Special attention should be given to perfecting and extensively adopting a uniform system for the engineering, technological, and organizational preparations for construction production, improving the contract method of doing work and developing in every way possible the continuous flow organization of construction, the Vinnitsa system of directly planning for and completely equipping a brigade and the center method of building the largest projects.

Realization of the measures specified for improving the technological level of construction in the republic should provide a reduction of 149 million rubles in its cost, a reduction of 317,000 tons in steel consumption and a substantial savings in labor and material resources by 1985.

It is specified that a 15 to 17 percent increase in labor productivity is to be provided during the 11th Five-Year Plan by means of an improvement in the technological and organizational standards for construction, including 4.4 percent due to the adoption of advanced components and materials, and an increase in the level of prefabrication, 3.26 percent due to an increase in the level of mechanization, 2.18 percent due to an improvement in labor organization, 1.78 percent due to a perfection of technology, and 0.53 percent due to the adoption of the flow method of housing construction.

A large role has been assigned to scientific research institutes in meeting these goals. UkSSR Gosstroy has approved six republic overall special-purpose programs for the 11th Five-Year Plan that are aimed at improving efficiency and the quality of construction and at perfecting the organization and technology of construction production. The efforts of scientists, designers and builders must be directed toward realizing the above programs and expanding the amount that effective developments are adopted.

The high evaluation of the work of designers and builders, which was reflected in the USSR State Prize being awarded to the creators of the landscape architecture for the Donetsk center and the pioneer camp "Chayka" in the Crimea during the 10th Five-Year Plan and the Ukrainian SSR State Prize imeni T. G. Shevchenko for the design and construction of the "Serebristyy" housing block in Lvov, music and drama theaters in Simferopol' and Sumy, a park in Cherkassy and a museum in Dnepropetrovsk, is a testimony to the successes in implementing the urban development policy in the republic. Six village construction projects in the republic were singled out for important government awards.

Along with this there are still many serious deficiencies in the planning and building affairs of populated areas in the republic. It is necessary to draw appropriate conclusions from the justifiable criticism that was heard in the address by republic designers and builders to the 26th Ukrainian Communist Party Congress.

The construction project for the Ukrainian capital--Kiev--requires special attention. During the current five-year plan the formation of the city's primary main streets should be completed--such as Gor'kiy, Frunze, Kosior and Shchors streets, the Avenue imeni the 40th Anniversary of the October Revolution, Druzhby narodov and Vossoyedineniya Avenues and also a number of squares.

It is necessary to work out designs for important concentrations of urban development in the city and its center on a competition basis, to persistently set a course toward construction projects that are ensembles, having individuality, continuity and unity in their architectural approaches.

Massive housing construction defines the foundation of urban architecture. There are more than ten large housing ensembles in Kiev; however, they are practically identical to one another in their architectural planning and spatial approaches. The variety of housing unit types is extremely limited. In order to improve the standards for a construction project it is necessary to perfect and develop a list of typical designs for series 96, T and KT and also to accelerate the adoption of a new address design and production system at DSK-4 [Housing Construction Combine-4] using products from housing units in series 134 that have been developed.

Large panel housing construction must be further developed in other cities in the republic as well. At the present time work is being done by UkSSR Gosstroy design organizations to perfect the series of typical designs for housing units that are most extensively used in the republic which will make it possible to stabilize the operations of housing construction enterprises and to improve the standard of urban development approaches to housing construction.

Research and design work in the amount of more than 280 million rubles was completed by UkSSR Gosstroy design organizations during the years of the 10th Five-Year Plan. Technical documentation for construction and installation work exceeding 11.5 billion rubles for more than 60,000 projects was worked out and given to clients. A reduction in the estimated cost of construction amounting to more than 400 million rubles was achieved. The savings in basic building materials during the design stage comprised: more than 160,000 tons of rolled metal, about 380,000 tons of cement, and about 400,000 cubic meters of lumber. An economic effect in the amount of 26 million rubles was obtained for the national economy due to the adoption of a new technique in construction through design work alone. The amount of work being done to automate construction design work by using an EVM [computer] increased substantially. Work is being done to automate drafting and scheduling operations.

Large and complicated tasks stand before republic designers during the current five-year plan resulting from the CPSU Central Committee and USSR Council of Ministers' decree "Concerning Measures to Further Improve Design and Estimate Affairs." These are, first of all, organizing the work of design institutes under new conditions for planning and financing design work, implementing the achievements of science, technology and advanced native and foreign expertise in designs, and ensuring that the overall program for automating design work is implemented. Its level of automation should be raised to 15 to 20 percent of the total volume. Design organizations must transfer to a new design stage.

While observing their holiday, workers at construction sites and in design and scientific research organizations in the sector are filled with resolve to ensure that the goals set by the 26th CPSU Congress and the 26th Ukrainian Communist Party Congress in the area of capital construction will be met.

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CONSTRUCTION

INTENSIFICATION OF CONSTRUCTION ENVISIONED

Moscow STROITEL'STVO I ARKHITEKTURA in Russian No 8 Aug 81 (signed to press 29 Jul 81) pp 3-4

[Interview with A. N. Shchepetil'nikovyy, UkSSR minister of industrial construction and delegate to the 26th UkSSR Communist Party Congress: "By a Course of Intensification"]

[Text] [Question] During the 11th Five-Year Plan the UkSSR Ministry of Industrial Construction must put more than 10 billion rubles of capital investments to use. Tell me, Arkadiy Nikolayevich, how the ministry intends to accomplish this huge constructive program?

[Answer] The 26th CPSU Congress, having set the goals for the new five-year plan, also precisely defined the way to meet them. The party insistently requires that we use the advantages of the socialist economic system and the huge economic capacities and reserves to the maximum and to complete the transition to an intensified method of construction production. It is necessary that decisive measures be implemented that are aimed at building faster with the least amount of expenditures on a modern technological basis and building only after careful calculations and with the greatest effect for the national economy.

The course toward intensification requires a persistent struggle to accelerate scientific and technological progress, and a close link between science and production. It is precisely in this way that it is possible to ensure a fundamental improvement in capital construction and to achieve the 15 to 17 percent growth in labor productivity that is planned for the five-year plan.

A certain amount of work was done in this direction during the 10th Five-Year Plan by construction organizations and ministry enterprises. The relative proportion of completely prefabricated construction reached 72.8 percent by 1980 which somewhat exceeded the goal that was set. The number of large panel and modular section housing units that were made operational increased by 14.2 percent and comprised 11 million square meters for the five-year plan, including an increase by a factor of 2.3 in new series of typical designs and by a factor of 4.4 for buildings intended for cultural and everyday purposes. The amount that prestressed reinforced concrete components, components from lightweight concrete, complete roof coverings and industrial partitions were used increased.

The adoption of efficient building components and new advanced materials on a massive scale remains the key goal in construction. We intend to accomplish it in collaboration with the scientific centers in the UkSSR Academy of Science and the scientists in the sectors' scientific research organizations by the special purpose programs that are in operation.

Organizational and technical measures for increasing industrialization and improving the quality of construction during the 11th Five-Year Plan are being worked out by the ministry. By 1985 the relative proportion of completely prefabricated construction must be increased to 76 percent and large panel and modular section housing units to 67 percent.

It is projected that housing construction combines are to be expanded and reconstructed to turn out improved series of housing units in Khar'kov, Nikolayev, Rovno, Kherson, Cherkassy, Chernigov, Kalush and other cities and new housing construction enterprises are to be built in L'vov, Lutsk, and Zaprudnyy in Krymskaya oblast. Not one oblast remains without a DSK [Housing Construction Combine] in the region served by the ministry; their total capacity comprises about 3 million square meters of housing. The proportion of housing units erected according to improved series of typical designs is being increased to 82 percent.

The demand by construction for advanced components and products will be satisfied to a much greater degree. The relative proportion of prestressed reinforced concrete being manufactured is projected to increase to 29 percent and loadbearing and enclosure components made of lightweight concrete to 21 percent. The output of roof slabs that are completely prepared by the plant, bathroom sections for housing construction, and prefabricated partition components for buildings intended for production and everyday use is expanding.

New scientific and technological trends for expanding the production of advanced components in industrial construction are being worked out by the ministry in collaboration with the NIISK [Scientific Research Institute for Construction Components] in the USSR Gosstroy and design organizations. Among these are, for example, pan decks with a dimension of 3 x 18 meters. The Sumy wool spinning factory and the second phase of the Dolina cotton spinning factory in Ivano-Frankovskaya oblast are already being built and textile factories in Dubrovitsa in Rovenskaya oblast and in Staro-Konstantinov in Khmel'nitskaya oblast and other enterprises are planned to be built by using these components. Calculations show that the use of a pan deck reduces labor consumption by 3 man hours and the estimated cost of construction by 12 rubles for each square meter of space in buildings.

New economical typical components will be used at many construction sites. The construction of 12 bakeries, for example, is planned by the ministry. Often they are erected according to individual designs which, it goes without saying, does not promote a reduction in labor expenses and an acceleration of construction. We set the goal that all the bakeries are to be constructed according to standard approaches using roofs without trusses--"P" type reinforced concrete slabs having dimensions of 3 x 8 and 3 x 24 meters. The output of these components, which sharply reduce labor consumption, has already been organized by the Ukrainian Industrial Reinforced Concrete Production Association in Sumy.

An increase is planned in the construction of housing units and buildings for sanitarium and health resort use from monolithic reinforced concrete poured in adjustable modular and sliding forms. During the five-year plan monolithic housing units with a usable floor space of more than 36,000 square meters should be built. The adoption of advanced technology for installing roofs and waterproofing on the basis of asphalt emulsion mastics and foundations from bored and rammed piles and bored support piers, and the construction of deeper structures and anti-seepage membranes by the "slurry wall" method is expanding.

The transition of construction to industrial methods of finishing buildings is an urgent problem. "Wet" processes must be supplanted by means of adopting plastic and other facing tiles on a massive scale and by gluing on rolled paper and polymer materials. We, in particular, intend to introduce suspended ceilings and gypsum board coverings for walls in buildings to install partitions, the production of which is gearing up at the UkSSR Ministry of Industrial Construction's Kiev plant. Our ministry has decided to increase the amount of gypsum board used on projects to 1 million square meters in 1985.

[Question] Intensification, as is well known, presupposes an efficient use of all available potentials. What is planned in the area of increasing the level of mechanization for construction and installation work?

[Answer] We have a sufficient amount of machinery available for completing basic construction work. Shortages are being experienced, as everywhere in the sector, only for tower cranes to erect tall buildings, pipelayers and certain other types of machines. The task consists of economically using all that is available: to strive to reduce the idle time of technology, to improve the coefficient of interchangeability and to adopt technological processes that save energy and materials.

During the 11th Five-Year Plan much work must be done to expand the arsenal of small means of mechanization. The proportion of manual labor is still great for many construction operations. Reducing it as much as possible is not only an economic problem but also a social one. It was emphasized at the 26th Party Congress that to solve this problem means to eliminate the existing obstacles on the road to transforming labor into the primary vital requirement of each person.

A goal has been set for us of providing all crews that complete labor-consuming types of construction and installation work with complete standard technological means of mechanization, inventory and tools over the course of three years. Large scale measures must be implemented to consolidate small mechanization sections that must take it upon themselves to complete a maximum amount of specialized work--waterproofing, inlaid tile and roofing work. It is well known how much physical force it takes to drive holes in reinforced concrete and brick walls. Special units that complete this using a diamond tool are already operating today in small mechanization sections in Cherkassy and in Trust No 86 in Khar'kov. It has been decided to form such mobile units for drilling holes everywhere.

Highly productive machines and mechanisms have been created by the Ukrainian Organization and Technology of Construction Institute--"Salyut" plastering stations, spackling and painting units, complete standard equipment for installing concrete roofs by a vacuum evaporation method and efficient equipment for welding and roofing work. We will continue to perfect and expand their output. New machines are being developed. Work on the creation of a more economical and convenient UShS-4 plastering station with a hydraulic pump for feeding mortar is being completed in collaboration with the Poltava Engineering and Construction Institute for Primary Industrial and Construction Means of Mechanization. Tests are being done on a new efficient SM-2 painting station at the Simferopol' Mechanical Repair Plant.

[Question] The necessity of propagating the continuous flow brigade contract method everywhere on the basis of improving the standard of engineering preparations and complete production and technological equipment is emphasized in the "Primary Principal Directions for Economic and Social Growth in the USSR for the Years 1981 to 1985 and for the Period to 1990." How will this goal be met?

[Answer] Many years of practice have convincingly shown that the brigade contract method has great potential for improving labor productivity. Based on calculations, the labor of 12 men is saved for each million rubles of construction and installation work that is completed by this method. Under the conditions of the current demographic situation, when the influx of labor resources in construction is contracting we must constantly strive to expand this form of management.

The brigade contract method is one of the most important trends in organizational, management and training work in our ministry. Administering this process is done on the basis of the long-term special purpose program "Contract." In 1980 more than 51,000 of our workers--49.3 percent of the total number--were encompassed by the contract method. The annual output for one worker in cost accounting brigades reached 12,472 rubles versus 8,183 in typical brigades. The greatest successes in adopting the brigade contract method were achieved by collectives in the Kherson Industrial Construction Combine and the Kiev Industrial Construction Combine, by the crews of Hero of Socialist Labor V. Plakhotin from the Khar'kov Housing Construction Combine, respected builder in the Ukrainian SSR V. Protsenko from the Belotserkovskiy Housing Construction Combine, P. Lazebnik from the Cherkassy Chemical Construction Trust and I. Gorbachev from the Vinnitsa Housing Construction Trust and others.

It is specified that the total amount of construction and installation work that is done by the brigade contract method is to be increased to 45 percent in industrial construction and to 88 percent in housing construction. It is necessary to extensively propagate it at enterprises in the construction industry and in motor vehicle transportation.

The transition to directly planning and completely equipping a crew with material and technological resources proved to have a positive effect on the development of the brigade contract method. This form of managing construction was first adopted at the Vinnitsa Industrial Construction Combine and received the approval of the Ukrainian Communist Party Central Committee, the USSR Ministry of Industrial Construction and the trade union central committee of the sector. While transferring operations to the new way, Vinnitsa construction workers at first achieved fairly good success, but then, due to a number of reasons--unsatisfactory provisions of materials and technology and poor engineering preparations for production--they were unable to use the advantages of the method to the full degree.

The failures of the Vinnitsa Industrial Construction Combine cannot and should not detract from the system of planning and completely providing a crew with production technology. Now the system is being used in a number of other construction combines, trusts, and DSKs [housing construction combines] and serves as a reliable engineering base for adopting the brigade contract method on a massive scale and improving its effectiveness. We will extend this good beginning even further and work on perfecting the method.

Experience was accumulated during the 10th Five-Year Plan about organizing the continuous brigade contract method in which each brigade in the construction production organizational structure participates fully irrespective of what role it fulfills in it. Such a form of complete cost accounting provided an extremely noticeable reduction in construction time for housing units, an improvement in quality and a reduction in their cost at the Kherson, Khar'kov, Rovno and Belotserkovskiy housing construction combines. We must extensively propagate the expertise of these advanced collectives.

The brigade contract method and system of planning and completely outfitting a crew required an improvement in all the engineering work in construction. Large technical design bureaus were formed at the Vinnitsa Industrial Construction, Rovno Industrial Construction, Kherson Industrial Construction and Volynin Industrial Construction Combines whose goal is to work out for the entire volume of construction work standard technological documentation that is reliable as a basis of the demands for material and technological resources and mandatory for planning construction and installation work and complete production and technological outfitting. We are counting on the success of the experiment.

However, this work cannot in the least degree reduce construction's demands on engineering and technical workers. It is these very people who must first of all be responsible for the engineering preparations, the adoption of a new technique, an improvement in the organization and technology for construction production and the propagation of advanced expertise on which the increase in labor productivity primarily depends.

It is necessary to improve the level of providing construction projects with plans for organizing construction. Design organizations often neglect to work out such documentation and the level at which it provides it does not exceed 40 percent. This is one of the chief reasons for the poor organization of production and the large losses of work time.

[Question] It is difficult to encompass all the aspects of the problem being examined within the framework of one discussion. Therefore, Arkadiy Nikolayevich, there is still one final question: how do you intend to improve construction management?

[Answer] The role of economical methods of managing production is increasing during the 11th Five-Year Plan. It is important to gradually improve management by construction and installation organizations, to study in depth, summarize and actively adopt progressive methods and advanced expertise for management.

First of all it is necessary to increase the standard of the scientific validity of plans. "A plan, certainly, should be realistic and balanced," said comrade L. I. Brezhnev in his report to the CPSU Central Committee at the 26th Party Congress, "but just as certainly it should be completed." Only in this case is it possible to ensure well-organized work at construction sites. The faulty practice of unfounded revisions in plans, both in the direction of a reduction or an increase, should be absolutely stopped because this negatively affects labor rhythm and trains personnel to be irresponsible.

An improvement in management is inconceivable without a profound change in the substance and methods of superivsion and a reorientation of the very psychology of personnel. Ministry supervisors themselves sometimes substitute for the directors of combines and administrators of trusts during the construction of large industrial complexes and reduce their organizational role. This practice must be absolutely condemned. Each person is obligated to be engaged in their own affairs and be responsible for them. Industriousness and discipline that are organically linked with bold initiative and enterprise should become the working style of administrators.

By following a course of intensification, improving technology, forms of organizing construction and the style and methods of management we will achieve a further improvement in efficiency and quality in all our work. The labor collectives in the republic's Ministry of Industrial Construction will meet the goals for the 11th Five-Year Plan and make a weighty contribution toward realizing the historic decisions of the 26th CPSU Congress for further strengthening our mighty homeland.

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CONSTRUCTION

SHORTCOMINGS IN NON-CHERNOZEM CONSTRUCTION PROGRAM CRITICIZED

Moscow SOVETSKAYA ROSSIYA in Russian 1 Aug 81 p 1

[Article, author unspecified: "Non-Chernozem Construction Projects"]

[Text] The non-chernozem encompasses a vast region of Russia. Moscow and Leningrad are located in it, also the industrial cities of the Urals and the central region, and the leading enterprises of many sectors of industry. A significant portion of the population of the Russian republic lives in this territory. A powerful production base is being created in order to reliably provide supplies of produce to the cities, to furnish factories and plants with the necessary agricultural raw materials, and to insure comprehensive development of the area's entire economy.

There are a number of reasons why this region has come to find itself in more difficult circumstances when compared to certain others. The CC CPSU and the Soviet government have programmed and are implementing broad measures to develop the non-chernozem region. This task is so complex and so urgent that its accomplishment will require the joint efforts of all union republics in the shortest possible time--thus stated Comrade L. I. Brezhnev.

The volume of capital investments directed towards this goal will increase by 26 percent for the 11th Five-Year Plan. There is not a single other comprehensive program, not another area that has received such a significant increase in credits. This is the expression in concrete terms of the exceptional attention being devoted to development of the Russian non-chernozem. And so, those who are entrusted with the tasks of implementing these large-scale plans, those who are responsible for materialization of these enormous state investment assets must approach their job with a still greater sense of responsibility. How is this task to be accomplished? How is work progressing these days on the non-chernozem construction projects?

The rural construction workers of Yaroslavl' have begun the five-year plan in a smooth-functioning manner. Without supplemental production capacities, and without broadening their own organizations, they have been able to increase volume of projects completed by 14 percent. This is especially gratifying when we consider that not very long ago this oblast was considered to be lagging behind. Changes for the better were noted last year. It was then that the oblast administration and the contractors themselves--the "Yaroslavl' Rural Construction" trust, an inter-kolkhoz association--established order in the planning process and introduced strict monitoring of task accomplishment. Today all contracting agreements are concluded within an established time frame, and there is a precise project schedule for 1982. Good management procedures are forming the path that leads to improved work quality at construction sites and to a strengthening of discipline. Great reliance is being placed here on work teams. Almost half of the "Yaroslavl' Rural Construction" collectives are working under the "Zlobin method." The Yaroslavl' Oblast experience merits attentive consideration and should be propagated.

This is all the more important since the construction program on the whole is not being accomplished in a satisfactory manner. Oblasts such as Smolenskaya, Kaliningradskaya, Kirovskaya, Kaluzhskaya, Murmanskaya, as well as the Komi ASSR are lagging behind planned levels by 8 percent or more. Construction workers in Vologodskaya Oblast are working more poorly than last year. Leading contracting organizations here have even reduced their volume. The "Vologda Heavy Construction" and "Cherepovets Metallurgical and Chemical Construction" associations are in no hurry to adopt urgent measures, even with regard to construction starts. Work at the Kharovskiy Flax-Processing Plant, for example, has been dragging on now for three-and-a-half years, instead of the 18 months allotted by the norm rate. And less than half of the project has been completed, although the enterprise was supposed to become operational by the end of the year. The Vologodskiy swine-breeding complex has the same drawn-out history. It was programmed to be brought into operation, but the plans are falling through as before. Now this planning and organizational mess is essentially behind. It is important to analyze the results of the first half year, and plan tough measures to bring all projects underway into operation.

An important role has been assigned to the union construction ministries in the program of development for the non-chernozem zone. The basic ministries--the Ministry of Heavy Construction, Ministry of Construction and Ministry of Industrial Construction--stand heavily in debt today to rural workers. They have powerful organizations at their disposal in the oblasts; nonetheless, their work on non-chernozem construction projects has been far from what capabilities would have permitted--their annual quotas are fulfilled to a level of 86-90 percent. This very year, organizations in the Ministry of Construction have not been able to cope with what they've been assigned--already they have failed to complete projects amounting to 19.5 million rubles in the prescribed time. Construction installation work in Smolenskaya, Kaliningradskaya, Novgorodskaya and Kalininskaya Oblasts has dropped sharply in volume. The reason behind the lag is dissipation of resources, major deficiencies in supplying the construction process with material and technical resources, poor use of the production base, of hoisting and excavation equipment, and poor utilization of workers' labor. Administrators in the contracting ministries are constantly assuring us that they are prepared to devote all resources straight to rural construction projects. Their boards make the appropriate decisions, yet there is still no sign of a turn for the better. Good intentions alone do not amount to very much. Some consistency is necessary in carrying them out, as well as precision organizational efforts and stricter monitoring of the activities of lower sections.

The activity of the union republics' construction organizations calls for stern reprimands. The Ministry of Rural Construction, the Russian Kolkhoz Construction Association, the Main Administration for Construction in Moscow Oblast and other departments failed to complete contracted projects in non-chernozem construction for the last five-year plan in the amount of hundreds of millions of rubles. Nor did they get down to the business of implementing a new program in the best way. Negligence can be found in the activity of the territorial associations, administrations and trusts, as well as weak monitoring on the part of local party and soviet organs, and by the department heads themselves. They often explain breakdowns in the plans by alleging that the contracting organizations are not ready to accept sharply increased construction volumes in the rural areas. Is this so? The Russian Kolkhoz Construction Association alone had 1.33 billion rubles with which to develop its production base in the 10th Five-Year Plan. The RSFSR Ministry of Rural Construction spent an impressive sum--805 million--to create 12 rural and three house-building combines in the non-chernozem oblasts over these years. The question is appropriate--where is the yield? Things even turned out just the reverse--inter-kolkhoz organizations reduced their growth rate. The Ministry of Rural Construction is worse yet--it is moving along a regularly descending line. In 1979 its collectives lowered project volume by 1.4 percent; in 1980 they dropped another 4.5 percent, and now three percent less has been accomplished than over the same period last year.

The fact of the matter is that, in putting the means of production into operation and introducing new construction industry capacities, many managers show little concern for getting the full return on their expenditures. We cite as an example the house-building combine at the Pogreba station of Bryanskaya Oblast. It was set up as long ago as 1974, and was designed to provide 50,000 square meters of living space annually. Today, however, the enterprise is producing one-ninth this amount. Is there much benefit from this? Especially when we take into account the fact that there is a rural construction combine right alongside the oblast center which also has a vast capacity reserve. There are many such facts. The production base of union republic organizations in the non-chernozem region is being utilized to an extent of 50-70 percent. The situation is somewhat better in enterprises subordinate to USSR ministries, but even there at least one-fifth of the production capacity is idle.

If one were to investigate the reasons a bit more closely, he would find it turns out they are rather typical. What is it, for example, that prevents us from opening up this very same Bryansk enterprise to full production? It is the blunders that have been tolerated before. Designer errors and incomplete construction work are appearing even now. The principle of using a comprehensive approach has been violated many times. Now the absence of a number of auxiliary shops is seriously cutting back production. Mistakes are the result of haste. However, instead of putting their production potential into action as quickly as possible, ministries are compensating by creating new combines, and in so doing they are allowing the same mistakes as before.

Another aspect of production potential is full utilization of the favorable summer period. There are few second shifts in many administrations and trusts, and machinery is in operation far less than the hours of daylight available. Summer must become the busy season for builders. The experience of farmers should be more widely applied in this regard. Even a simple shift augmentation of a couple of hours will have an immediate effect--it will avert the expensive crash work we see in December. Maximal use of good weather, full load-capacity utilization of machines and equipment--this is the chief concern of construction project managers and of local party and soviet organs. The work of public nutrition, transport and everyday services must be subordinated to this.

In the recently adopted resolution of the CC CPSU and USSR Council of Ministers on further developing and enhancing agricultural efficiency in the non-chernozem region of the RSFSR, concrete tasks have been assigned to builders for the 1981-1985 five-year plan. Today there must be a precise program of putting into operation agricultural construction projects and the processing branches of industry for every organization that operates in the non-chernozem zone. It must be a program directed towards absolute implementation of plans that have been programmed. The majority of contracting administrations, associations and trusts have been able to tighten up over the past two months. However, the lag which has been tolerated since the beginning of the year still has not been overcome. Ministries and departments, and managers of construction organizations in the provinces that participate with the autonomous republics' councils of ministers and oblast executive committees should study the state of affairs of every project with the aim of speeding up the work rate even further and getting back on schedule.

9768
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CONSTRUCTION

NEW SYSTEM FOR FINANCING AND ISSUING CREDIT FOR CAPITAL CONSTRUCTION

Moscow STROITEL'STVO i ARKHITEKTURA MOSKVY in Russian No 8, Aug 81 (signed to press 5 Aug 81) pp 6-7

[Article by G. Sokolov, manager of Moscow Municipal Office of USSR Stroybank and Candidate of Economic Sciences: "Credit for Unfinished Production"]

[Text] This year the construction organizations in the city of Moscow, similar to others throughout the country, in conformity with the 12 July 1979 Decree No. 695 of the CC CPSU and the USSR Council of Ministers entitled "On Improvements in Planning and Intensifying the Effect of the Economic Mechanism With Regard to Raising Production Efficiency and the Quality of Work, converted over to the maintenance of accounts between the clients and contracting organizations for fully completed and turned over for operations enterprises, underway complexes, phases and projects, which are ready for the production of goods or the rendering of services in accordance with the estimated cost of the commodity construction output.

The goal of the new economic system is that of raising the efficiency and quality of construction production and achieving unconditional fulfillment of the tasks for placing production capabilities and projects in operation, for labor productivity and profit and for reducing the construction schedules.

The entire system of credit-financing services and accounting in construction must first of all be directed towards solving these tasks.

Two most important conditions for converting contractual organizations over to planning production and evaluating their activities in accordance with the index for commodity construction output are the issuing of credit for unfinished construction production prior to the placing of construction projects in operation and the maintenance of accounts with clients for fully completed projects and work complexes.

The elimination of intermediate payments, expanding the range of projects paid for upon the completion of work, the consolidation of stages and their formation according to a technological principle and annual growth in credit investments instead of financing -- all of these measures, carried out during the past few years, served as preparation for the final goal -- converting construction over to accounts for commodity construction output.

More than 3 years ago, Glavmosinzhstroy [Main Administration for the Construction of Engineering Installations in the City of Moscow] was the first of the construction main administrations in Moscow to launch an experiment on the introduction of a new method for planning and evaluating activities based upon commodity output. The leaders of the main administration evaluated the importance and prospects for this undertaking in a timely manner, after implementing the conversion over to the new managerial conditions in response to a recommendation by the Moscow Municipal Office of USSR Stroybank [All-Union Bank for the Financing of Capital Investments] and with maximum support and assistance from the party and soviet organs of Moscow.

The basic principles for the new organization for financing and issuing credit for capital construction are:

...the abolishment of all types of intermediate payments for construction-installation work carried out, including advances by clients for covering the expenditures for unfinished construction production and their replacement by bank credit;

...the use, as a source for issuing credit for unfinished construction production, of the resources of clients, made available in connection with the maintenance of accounts with contractual organizations, in the absence of those intermediate payments which accumulate in special accounts in the bank;

...repayment of the credit obtained upon the completion of construction and the accounts for commodity construction output, using the accumulated funds of the client.

The system outlined for expanding the sphere of crediting, instead of financing, makes bank credit, which by its very nature is a very important lever for bringing about improvements in the economic activities of construction organizations, a stronger and more efficient means for achieving such improvements.

Thus, all of the above-mentioned components of the new system for financing and issuing credit for capital construction, together with the existing forms for issuing incentives, are directed towards creating interest among the contractual organizations in achieving the final results of their work -- completing the construction projects within the established periods.

Let us analyze in greater detail its actual use. When converting over to the new conditions for financing and the issuing of credit, advances issued earlier are reformulated by the contractual organizations into bank indebtedness in the form of a loan for unfinished construction production and by the clients -- into surplus funds in special accounts in the bank, used as sources for the issuing of credit.

The cost of commodity construction output is determined according to an estimate approved in the established manner, coordinated with the general contractor and accepted by the bank for financing.

Underway complexes and construction phases are set forth and approved in the planning-estimates documentation and are indicated in the title list of the client. The commodity construction output counts toward plan fulfillment, provided the capabilities introduced are not lower than those called for in the plan or title list.

The payment is made from a special account of the client using funds which have accumulated. These funds are transferred from the accounts for financing capital investments, by agreement with the bank every 10 days, quarterly or monthly, in the amount corresponding to the proportion of the planned volume of construction-installation work for the current quarter. In the event of a temporary absence of funds in the financing accounts, the clients are provided with credit in the established manner.

Upon the completion of construction, the computations for work fulfilled are carried out based upon the documents of the state committee for accepting a project for operation.

The issuing of credit for unfinished construction production, similar to the issuing of other types of loans, is carried out by the banks on a differentiated basis, that is, it is made dependent upon the results of the economic activities of the contractual organizations: fulfillment of the planned tasks, observance of state planning and financial discipline, the preservation and correct use of internal working capital, the timeliness of computations, the status of accounting and reporting, observance of the special purpose nature of the work and the urgency, reimbursement and security of the credit.

Credit is presented to contractual construction-installation organizations for covering the expenses for unfinished construction production, prior to the placing in operation of fully completed construction of enterprises, underway complexes, phases and projects, prepared for the production of goods or the rendering of services. Prior to the planned period for the completion of construction, the banks collect 0.5 percent interest annually for the use of a loan. The issuing of credit continues even in the event of a disruption in the actual schedules for the completion of work, but with the annual interest for use of the load being raised to 4 percent.

The bank does not issue credit for expenses for unfinished construction production on projects and work complexes the construction of which has been terminated, was not called for in the plan, not supported by planning-estimates documentation, not accepted by the bank for financing and also expenses associated with over-fulfillment of a plan by projects, for which over-fulfillment is forbidden (administrative, sports, entertainment, capital repair and others). The work volumes for such projects are subject to removal from fulfillment, with a corresponding recomputation of the wage fund subject to be paid to the organization.

The experience of issuing credit, accumulated by the construction organizations of Glavmosinzhstroy during the period of work under the new system, reveals a number of positive economic results. The most effective result is the stable, annual, absolute and relative growth in final product -- the placing in operation of construction capabilities and projects within the overall volume of construction-installation work -- one of the principal goals of the experiment. Since 1977, the volume of work actually carried out has increased by almost 10 percent, whereas the commodity construction output increased by 42 percent. Compared to 1977 when commodity output amounted to 74 percent of the volume of work carried out, by 1980 this figure had increased to 95 percent.

The number of projects being turned over to clients is increasing with each passing year. The established tasks for the most important national economic indicator -- growth in labor productivity -- are being carried out by the main administration. Analysis reveals that a decrease is taking place in the number of Glavmosinzhstroy organizations which are not carrying out their planned tasks and which are tolerating overexpenditures of the wage fund. Within these organizations, the percentage of overstatements of work volumes, established by contolled measurements of the bank, are considerably lower than in other construction organizations of Moscow.

All of this underscores the fact that the conversion of Glavmosinzhstroy over to the new method for planning and evaluating the work of contractual organizations based upon commodity construction output and to the new forms for financing and issuing credit for capital construction has become an efficient factor for intensifying the effect of the economic mechanism with regard to raising production efficiency and the quality of work.

A large role in this regard is played by bank credit. Under the financing system which existed earlier, the amount of credit investments in the sources for covering the expenses for unfinished construction production did not exceed 8-10 percent and today its proportion is 96-98 percent.

During the period commencing with the conversion of the main administration over to the new conditions, loan indebtedness for unfinished construction production increased. For example, on 1 January 1977 it was 9 million rubles, on 1 January 1978 (the year of the conversion) -- 179 million rubles and on 1 January 1981 -- 268 million rubles.

Accordingly, a considerable increase took place in the amount of funds paid by organizations to the bank for the use of loans. Whereas in 1977 the contractual organizations of Glavmosinzhstroy paid out 1.5 million rubles for the use of credit, by 1980 more than 3 million rubles were required. The untimely turning over of commodity construction output for operations and the associated increased payments for the use of bank credit are adversely affecting the size of the incentive funds and lowering the opportunities for economic motivation of the organizations.

This is promoting a concentration of forces and resources, particularly at underway projects, and their completion within the established periods. As a result, the proportion of projects not turned over on schedule by Glavmosinzhstroy decreased on the average from 70 to 30 percent.

In addition to credit for unfinished construction production, the contractual organizations of Glavmosinzhstroy took advantage of other types of bank loans. Thus, in 1980, the overall total of indebtedness of the main administration amounted to 516 million rubles, of which amount 384 million rubles or 75 percent were used for loans for unfinished construction production, 95 million rubles or 19 percent -- credits for the payment of supplier accounts, 18 million rubles or 4 percent -- credit for making payments for mutual requirements and 2 million rubles or 0.5 percent -- loans for wage payments.

The extensive participation of bank credits in the accounting operations of Glavmosinzhstroy promoted timely payments to suppliers and sub-contractors. Here the level of accounting discipline was considerably higher than in other construction main administrations in Moscow. Thus, whereas the construction program for Glavmosinzhstroy was roughly two times less than that for Glavmospromstroy [Main Administration for Industrial Construction of the Moscow Municipal Soviet] and four times less than that for Glavmosstroy [Main Administration for Housing and Civil Engineering Construction in Moscow City, the non-payments by Glavmosinzhstroy were on the average 6-7 times less compared to those for both Glavmospromstroy and Glavmosstroy. Among the subunits of the main administration there are no organizations which have been converted over to a special regime for crediting and accounting.

In 1980, Glavmosstroy converted the Moscow State OKD [ob"yedineniye krupnopanel'nogo domostroyeniya; Association for Large Panel Housing Construction], which has an overall annual volume of construction-installation work of more than 300 million rubles, over to the new system for the planning, financing and evaluation of work based upon the indicator for commodity construction output. The association carries out the construction of dwellings and ensures the placing in operation of more than 50 percent of the entire area turned over by Glavmosstroy.

The results of the production-economic activities during 1980 testify to the advantages offered by the new principles of management. During the conversion of the organization over to the new conditions, with the simultaneous introduction of the construction of Series P43/16 and P44/16 dwellings, in accordance with the Uniform Catalog and with a raised labor intensiveness for operations, the task for labor productivity was planned for a reduction of 1.1 percent compared to the previous year. Despite this fact however, the association, in connection with its conversion over to the new conditions, found additional reserves and over-fulfilled its plan for labor productivity by 1.2 percent.

In 1979, five organizations did not fulfill their output plan and in 1980 -- only one.

The plan for commodity construction output was fulfilled by 101 percent.

A profit of 51 million rubles, or 5 percent more than the plan, was obtained from the sale of construction output. During the year under review, 3.8 million rubles were added to the economic incentive funds.

A trend towards improved operations was observed in all of the association's subunits. It is sufficient to state that during 1979 four organizations under-fulfilled their profit plans by the overall amount of 1.13 million rubles and in 1980 -- only one organization failed to fulfill this plan by 20,000 rubles.

Thus the advantages offered by the new system for evaluating operations based upon commodity construction output are beyond question.

Certainly, the facts mentioned above are not meant to imply that shortcomings do not persist in the work of Glavmosinzhstroy and the OKD of Glavmosstroy following the conversion over to the new conditions of management or that all problems associated with the carrying out of this experiment have been solved to satisfaction. Just as in any new endeavor, and especially in such a complicated branch of the national economy as construction, many difficulties and unsolved tasks are to be found which require maximum consideration when converting over to a new system of other construction organizations.

Under the new conditions, successful work by the contractual organizations must be accompanied by validity, practicality and stability in the approved planning tasks and mainly in the plan for commodity construction output, by conformity of the plan to the data in the drafts and title lists of the clients and by a proper balance between the overall volume of commodity output with its arrangment among specific projects and the capabilities of the organizations and the rhythmic nature of the work.

Unfortunately, many of these planning problems have not been properly solved. The title lists of the clients still do not always take into account the volume of commodity output. Quite often the indicators for the title lists do not correspond to the plans of the contractual organizations. The plans for commodity output are not coordinated with the plans for placing construction projects in operation and the program of operations according to goods and volume -- with the arrangement of work by projects. The supplying of the construction projects with proper planning-estimates documentation continues to remain unsatisfactory. As a result, numerous changes are introduced into the original plans throughout the year by the Moscow Municipal Planning Commission. All of this adversely affects the organization of production and the economic activities of the contractual organizations. In addition, it fails to promote a proper realization of the potential embodied in the new system of management.

Serious shortcomings exist in the formation of the construction program, there is a low concentration of work volumes at underway and important construction projects and a lack of balance exists between the capital construction plan and the capabilities of the contractual organizations. It is sufficient to cite the following example. The construction projects included in the program of Glavmosinzhstroy, during the course of the first 6 months of this year, were not supplied with financial resources in the amount of 23 million rubles. The bank was not authorized to issue credit for this volume for covering unfinished construction production.

In Glavmosstroy and Glavmospromstroy, the work volumes according to the approved programs exceed the maximum production capabilities of these main administrations by 12-13 million rubles.

Under the new conditions, cost accounting is becoming a stronger factor within the construction organizations and greater responsibility is being displayed by the main administrations, associations and trusts for the results of economic-financial operations.

However, we are of the opinion that the leaders of the main administrations and organizations did not devote adequate attention to this problem during the course of preparatory work.

The conversion over to accounts for commodity construction output must be accompanied by improvements in the role played by a client in construction production. As never before, great importance is being attached to supplying the construction projects with approved planning-estimates documentation in a timely manner, with the underway complexes being identified, to the timely conclusion of contractual agreements and the opening of financing and to making tangible financial resources available. Thus the timely fulfillment of the plan for commodity output by a contractor is dependent to a considerable degree upon the work performed by the client.

The practice of issuing short-term credit to contractual organizations for unfinished construction production is revealing substantial shortcomings in the establishment of credit limits and in the use of such limits.

We frequently encounter incidents wherein contractual organizations, in accordance with all indicators, are entitled to obtain credit and yet are unable to take advantage of such credit owing to a restrictive limit and often owing to a complete absence of a limit. On the other hand, there are other organizations which do not use their limits for various reasons. The Moscow Municipal Planning Commission and the construction main administrations are not redistributing the credit limits among organizations in an efficient manner. We are convinced that when an entire credit limit and its distribution and redistribution are fully in the hands of a bank it is possible to compute every 10 days and in an efficient manner the loan requirements of contractual organizations and, based upon this data, to maneuver the credit resources extensively within the construction organizations of Mosgorispolkom.

The complex of tasks for distributing and redistributing the credit limits and their workload for all of the construction organizations are being solved considerably more effectively using electronic computers. The program for solving these tasks has already been prepared and introduced into operations by the Computer Center of the Moscow Municipal Office of USSR Stroybank.

For their part, the institutes of Stroybank are undertaking all measures aimed at improving the new method of financing and issuing credit for capital construction, furnishing assistance to organizations in converting over to the new operating conditions and accelerating the implementation of this most important national economic measure.

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CSO: 1821

CONSTRUCTION

UZBEK SPECIAL CONSTRUCTION MINISTER DISCUSSES DEVELOPMENTS

Tashkent PRAVDA VOSTOKA in Russian 9 Aug 81 p 2

/Article by Uzbek SSR Minister of Installation and Special Construction Work Kh. Shagazatov: "Toward New Accomplishments"/

/Text/ Today is the professional holiday of construction workers. All the Soviet people are celebrating it along with the 11 million workers of the sector.

The occupation of construction worker is surrounded in our country by esteem and respect. Its representatives are actively and productively increasing the economic potential of the homeland and the well-being of the Soviet people, are promoting the development of culture and are strengthening the defensive power of the country.

In the unified family of fraternal peoples the construction workers of our republic have also made major gains.

Uzbekistan has become a truly gigantic construction site. Nearly half a million workers are engaged in construction and installation work. It is possible to judge the scale and rate of construction from the following figures. Whereas during the Eighth Five-Year Plan 13.6 billion rubles of capital investments were assimilated in the republic and during the Ninth Five-Year Plan 19.5 billion rubles were assimilated, during the 10th Five-Year Plan this indicator approached 25 billion rubles.

During the years of the 10th Five-Year Plan about 100 large industrial projects and works, among which are the Syrdar'inskaya GRES and the Khodzhikentskaya GES, the new capacities at the Ferganskaya TETs, were put into operation in the republic and are providing output. The largest complex in the country for the production of caprolactam in Chirchik, new capacities at the Samarkand Superphosphate Plant and the Almalyk Chemical Plant and capacities for the smelting of 750,000 tons of steel at the Uzbek Metallurgical Combine imeni V. I. Lenin were put into operation. During this period new enterprises which produce goods for the population were built, including the Andizhan Cotton Combine, the second section of the Bukhara Cotton Combine, a factory of nonwoven materials in Pap, a kitchen furniture plant in Tashkent, a carpet combine in Khiva, a china factory in Kuvasay, oil-extraction plants in Urgench and Gulistan, the Novotashkentskiy Cannery and a number of other projects of light, the food, the meat and dairy and local industries.

Housing construction is acquiring a larger and larger scale. Each year more than 600,000 inhabitants move into new apartments or improve their housing conditions. It is important to note that the rate of the complex construction of housing is constantly increasing. During the last five-year plan more than 27 million m^2 of housing were built; the assignments on the placement of schools, children's preschool institutions and public health facilities into operation were exceeded.

The gains made by the republic construction workers are the result of the everyday attention and enormous concern of the Central Committee of the Communist Party of Uzbekistan and the republic government. Responding to the paternal concern, the workers of the sector are fully resolved to honorably fulfill the decisions of the 26th CPSU Congress and the 20th Congress of the Communist Party of Uzbekistan.

In the development of the productive forces of the republic, in the gains made in the sphere of its economy and culture and in the increase of the well-being of the population there is a share of the labor of the collectives of the construction and installation organizations and industrial enterprises of the Uzbek SSR Ministry of Installation and Special Construction Work, which are taking part in the construction of the majority of projects.

The ministry coped with the assignments of the 10th Five-Year Plan, having fulfilled the plan of construction and installation work ahead of time, on 21 November 1980 and the plan on the sale of industrial products on 3 November.

For the successful placement into operation of the unique complex for the production of caprolactam in Chirchik the construction workers and installers, designers and operators received the high rating of the CPSU Central Committee. The cordial, sincere words of the greetings, which were sent by Leonid Il'ich Brezhnev to all the participants in the construction of this complex, are an inspiration to new accomplishments.

During the first year of the 11th Five-Year Plan the workers of the sector are working like shock workers. The 15 best ones have come forth with a patriotic initiative which was approved by the Central Committee of the Communist Party of the republic--to fulfill 10 or more annual assignments during the 11th Five-Year Plan. Among the initiators is F. Shaydulin, the leader of a brigade of fitter-installers of Specialized Trust No 93.

The initiative of the leading workers has been taken up by many workers of the sector. The ministry is receiving reports on the fulfillment of the plan of the first year of the 11th Five-Year Plan during the first half of the year. Among the guardsmen of the new five-year plan are electric welders M. Korzhanov and F. Doludenko; N. Tokhtarov and B. Nuritdinov, the leaders of brigades of installers; A. Rubtsov, the leader of a brigade of fitter-sanitary engineers, and many, many others.

Advancing toward the Day of the Construction Worker, the collectives of the ministry successfully coped with the assignment of 7 months, which the adoption of the brigade contract promoted to a significant extent. About half of the total amount of work was accomplished by the advanced method.

In installation work the block installation of equipment, structural members and piping and the installation of units of complete plant readiness are being used more and more extensively, the conveyor method of installation has been introduced at the construction site of large industrial projects. The introduction of new technology and advanced materials had a favorable influence on the increase of productivity and work quality.

The construction workers and installers have a right to be proud of the achievements. But much still has to be done. Thus, during the second half of the year it is planned to put into operation more than 70 most important industrial projects and capacities, much housing and many cultural and personal facilities. Of course, this will require great efforts, the efficient organization of labor and an even greater output so as to increase the effectiveness of capital investments.

In capital construction, unfortunately, it is still not possible to do without shortcomings and slips. The assets and material and manpower resources being allocated are often dispersed among numerous projects. The proportion of manual labor is high, unjustifiably large losses of working time are permitted. Shortcomings in planning and irregularities with supply also have an effect. And as a result the dates of the placing of projects into operation are delayed. It is the duty of clients and contractors, designers and suppliers of equipment, workers of planning and financial organs to do everything possible in order to improve the matter radically and to increase the efficiency of capital construction.

The recently held meeting of the party aktiv of the republic discussed measures on the implementation of the instructions of Comrade L. I. Brezhnev on the timely placement into operation of the start-up projects of 1981.

The decree of the aktiv was interpreted by the construction workers and installers as an urgent program of actions. The workers of the sector will do everything possible so that the might of our homeland would increase in the future.

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AZERBAIJAN CC CP DECREE ON FUTURE CITY TRANSPORT DEVELOPMENT

Baku BAKINSKIY RABOCHIY in Russian 15 Aug 81 p 1

/Article: "In the Central Committee of the Communist Party of Azerbaijan"/

> /Text/ The Central Committee of the Communist Party of Azerbaijan has adopted a decree on the comprehensive plan of the development of all types of urban passenger transport of the cities of Baku and Apsheron for 1981-2000.

In the decree it is noted that in recent years owing to the constant attention of the party and soviet organs of the republic the service of the population of Baku by all types of passenger transport has been developed on an extensive scale, the city road transport network has been constantly improved. The construction of the first section of the Baku Subway imeni V. I. Lenin with a length of 18.6 km, which linked the central part of the city with the large residential areas and industrial enterprises, was completed. More than 80 km of trolleybus and streetcar lines were built, the city beltway and the main highway along Prospekt Neftepererabotchikov were put into operation, Moskovskiy Prospekt, the Baku-Bina Airport Highway and others with a total length of more than 50 km were renovated. At the most congested highway and street intersections four overpasses and seven underpasses were built.

During the 1970's more than 4.8 billion passengers were carried by all types of urban transport, which is 1 billion more than during the preceding decade. The technical condition of the transportation fleet was improved, the capacities of the maintenance production base increased. All this became one of the components of the implementation of the social program of the development of the capital of the republic.

At the same time the analysis showed that the operating transportation system of the city does not conform to the tasks set at the 30th Congress of the Communist Party of Azerbaijan and at the 44th Baku City Party Conference on the further improvement of the service of the population by transport and does not meet the increased demands on the comfort and speed of trips and the reduction of the expenditures of time on travel.

The intensive building up of the outlying rayons of Baku caused a significant redistribution of the population on the territory of the city and required a significant change of the direction of passenger traffic. The measures on the development of the passenger transportation of Baku, which were stipulated for 1971-1980, were not completely fulfilled, more than 50 million rubles planned for these purposes were not assimilated. The construction of the lines of the Baku Subway was carried out with a delay, its second section with a length of 6 km was not completed.

Due to serious miscalculations ground electric transportation did not undergo the proper development, 49 km of trolleybus and streetcar lines were not put into operation, the actual rate of speed of these types of transportation is 20 percent less than the standard rate. Bus transportation is operating unsatisfactorily, the vehicles operating on the routes are overloaded, the discipline of drivers is low, the established schedule has not been kept, which is evoking serious reproaches of the population. A great lag has occurred in the development of the primary highway system of the city.

The Baku City Committee of the party, the Baku City Soviet Executive Committee, the Ministry of Motor Transport and the Ministry of Housing and Municipal Services have dealt unsatisfactorily with the development of urban passenger transportation and have not devoted the proper attention to this important social problem.

On the instructions of the Central Committee of the Communist Party of Azerbaijan a comprehensive plan of the development of all types of urban passenger transport of the cities of Baku and Apsheron for 1981-2000 has been drafted for the purposes of establishing a long-range program on the radical improvement of the service of the population, the considerable enlargement of the transportation network and the strengthening of its material and technical base.

The further development of the Baku Subway is called for by the comprehensive plan. During the years of the 11th and 12th Five-Year Plans the operating Baky Soveti-Neftchilyar line will be lengthened by 4.4 km to the Square of the Ukraine in Akhmedli. The line of the second section of the subway with a length of 6 km from the Mikrorayon Station will be lengthened by another 4.1 km to the industrial zone of the Darnagyul' Rayon and will become a convenient transportation link of microrayons 6, 7, 8 and 9 and the settlement of Vorovskiy with the central part of the city. The 28 Aprelya Station will be renovated with the building of a transfer center for increasing the traffic capacity. The indicated legs with six stations will be the third sections and will be completed by 1990. During the next decade the construction of a new line with five stations from the Shaumyan Station to the promising residential area of Gyunashli, which is located to the southeast of the settlement of Serebrovskiy, is envisaged; the construction of a line from the Nizami Station to the rayon of future housing development of Patamdar with four intermediate stations is being planned. By 2000 the Baku Subway will come to 51.6 km and will have 34 stations.

Ground types of electric transport will undergo considerable development. The length of trolleybus lines during this period will increase twofold, the number of vehicles on the routes will increase 3.7-fold, the network of streetcar lines will be lengthened and renovated. The implementation of the measures stipulated by the transportation plan will increase the proportion of electric transport in the total volume of passenger traffic to 70 percent as against 44.5 percent at this time. This will have a favorable influence on the condition of the air basin of the city and will create reliable conditions for the exemplary transportation service of the population of Baku.

The development of bus transportation is planned by means of the extension of express lines, the increase of the fleet and the construction of garages. More than 140 km of urban highways and first of all new major highways from the Plant imeni Lieutenant Shmidt to Prospekt Neftepererabotchikov and from the beltway to the Baku-Bina Airport Road will be built and renovated. Moreover, the construction of a new bypass for truck traffic, which will take upon itself the entire through freight traffic flow, which at present passes through the streets of the residential rayons of the city, is envisaged. It is planned to unite the individual existing sections of roads by new legs, having ensured the creation of continuous motor routes.

Work on the renovation and widening of Prospekt Lenina, Rabochiy and Tbilisskiy Prospekts, the Zykh and Binagadi Highways and other thoroughfares is also called for. At sites of the heaviest traffic 16 modern cloverleaves, 25 overpasses and 15 underpasses will be built, which will ensure the creation of freeways with high speeds and traffic safety.

The questions of improving suburban railways were also solved in the comprehensive plan. The renovation of the urban railroads and the updating of the rolling stock are envisaged.

As a whole it is planned to allocate nearly 1.2 billion rubles for the implementation of the measures on the development of all types of urban transport up to 2000, which will require the increase of the capacities of construction and installation organizations and the production bases for subway construction, the construction of electric transport lines and road construction.

For the purposes of the further development of the urban passenger transportation system, the provision of the population of Baku with service at the level of current social, scientific and technical progress and to execute the decisions of the 26th CPSU Congress on the improving of the living conditions of the workers, the Central Committee of the Communist Party of Azerbaijan approved for the most part the comprehensive program of the development of all types of urban passenger transport of the cities of Baku and Apsheron for 1981-2000.

For the purposes of expediting the solution of the questions connected with the implementation of the comprehensive program of the development of all types of urban passenger transport of the cities of Baku and Apsheron for 1981-2000, the republic Gosplan, the Baku City Committee of the party, the Baku City Soviet Executive Committee, the Ministry of Housing and Municipal Services, the Ministry of Motor Transport, the Azerbaijan Railroad, Bakmetropoleten and Baktonnel'stroy have been instructed to elaborate and submit within a 3-month period to the republic Council of Ministers specific proposals on the step-by-step and stage-by-stage implementation of the outlined program of the improvement of the transportation service of the population of Baku, having provided in them for:

a faster rate of development of the Baku Subway and the assurance of the completion of the third section of its construction in the full amount by 1990;

a high rate of development of ground types of electric transport, bearing in mind the preferential construction of trolleybus lines between the central, industrial parts of the city and the rayons of mass housing construction;

the development of highway transportation routes and structures, the performance of this work first of all in the most heavily travelled directions;

the creation of modern production bases for subway construction, highway transportation construction, electric and other types of urban ground transportation, the increase of the capacities of design organizations for the drafting of the necessary technical specifications for the support of the increasing amounts of transport construction.

The unsatisfactory progress of the construction of the second section of the Baku Subway is noted and it is demanded of the managers of Baktonnel'stroy (Comrades Abdulragimov, Kurbanov and Muganlinskiy) that they eliminate the allowed lag as quickly as possible and implement specific measures on the assurance during the 11th Five-Year Plan of the sharp acceleration of the rate of work and the increase of the amounts of construction of the lines of the subway, the development of the production base and the fulfillment of the program outlined by the measures on the comprehensive plan.

The republic Gosstroy, the Union of Architects, the Union of Artists and the Baku City Soviet Executive Committee when designing and building highway transportation objects, subway stations and overpasses are ordered to monitor strictly the efficiency of the technical decisions being made, the esthetic level of the plans, the use in them of advanced forms of national architecture and elements of monumental art and the quality of the performance of the work.

The Baku City Committee of the party and the Baku City Soviet Executive Committee should step up the monitoring of the fulfillment of the measures on the implementation of the comprehensive plan and first of all the construction of the second and third sections of the subway, should review each quarter the progress of the construction of its objects and should take the necessary steps on the provision of effective assistance to the collectives, the unconditional fulfillment and exceeding of the plan assignments.

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